Ancient Egypt

Barry J. Kemp

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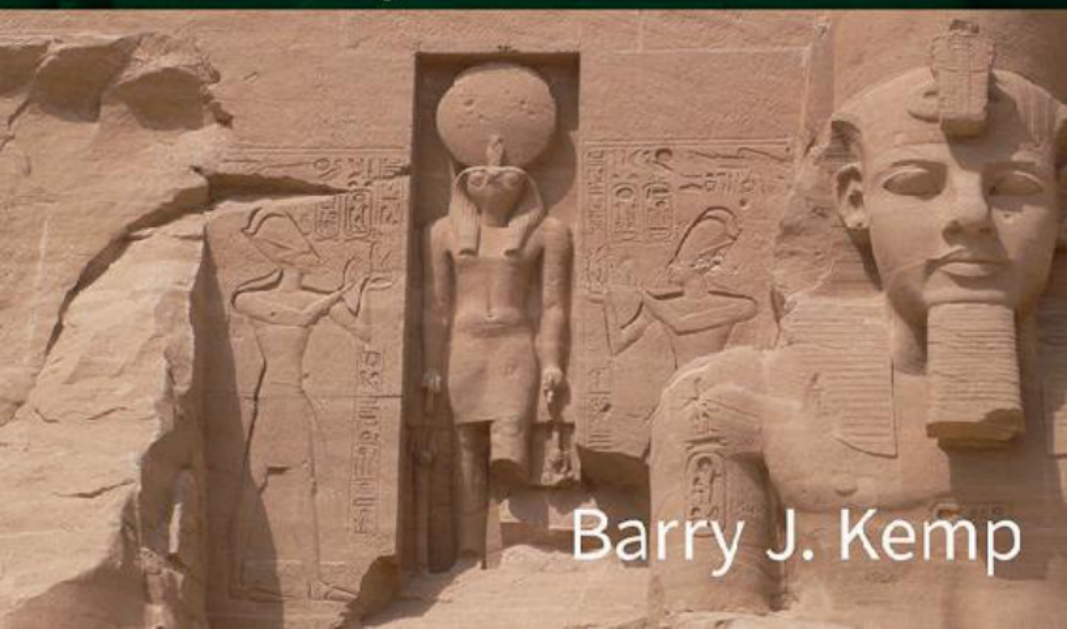
Ancient Egypt

Anatomy of a Civilization



Barry J. Kemp

Ancient Egypt

This fully revised and updated third edition of the bestselling *Ancient Egypt* seeks to identify what gave ancient Egypt its distinctive and enduring characteristics, ranging across material culture, the mindset of its people, and social and economic factors.

In this volume, Barry J. Kemp identifies the ideas by which the Egyptians organized their experience of the world and explains how they maintained a uniform style in their art and architecture across three thousand years, whilst accommodating substantial changes in outlook. The underlying aim is to relate ancient Egypt to the broader mainstream of our understanding of how all human societies function.

Source material is taken from ancient written documents, while the book also highlights the contribution that archaeology makes to our understanding of Egyptian culture and society. It uses numerous case studies, illustrating them with artwork expressly prepared from specialist sources. Broad ranging yet impressively detailed, the book is an indispensable text for all students of ancient Egypt and for the general reader.

Barry J. Kemp is Emeritus Professor of Egyptology (University of Cambridge), Senior Fellow of the McDonald Institute for Archaeological Research (University of Cambridge) and director of the Amarna Project.

Ancient Egypt

Anatomy of a Civilization

Third Edition

Barry J. Kemp

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Abbreviations of works (other than journal articles) cited more than once in the notes or captions

Works abbreviated by title

AfO	*Archiv für Orientforschung*
AJA	*American Journal of Archaeology*
AJPA	*American Journal of Physical Anthropology*
AJSL	*American Journal of Semitic Languages*
AR	*Amarna Reports*. 6 vols. London, EES, 1984–95.
ASAE	*Annales du Service des Antiquités de l'Égypte*
Ä&L	*Ägypten und Levante*
BIFAO	*Bulletin de l'Institut français d'Archéologie orientale*
CAJ	*Cambridge Archaeological Journal*
CdÉ	*Chronique d'Égypte*
CdK	*Cahiers de Karnak*
EA	*Egyptian Archaeology*
GM	*Göttinger Miszellen*
JAEI	*Journal of Ancient Egyptian Interconnections*
JAOS	*Journal of the American Oriental Society*
JARCE	*Journal of the American Research Center in Egypt*
JAS	*Journal of Archaeological Science*
JEA	*Journal of Egyptian Archaeology*
JEH	*Journal of Egyptian History*
JESHO	*Journal of the Economic and Social History of the Orient*
JFA	*Journal of Field Archaeology*
JNES	*Journal of Near Eastern Studies*
JSSEA	*Journal of the Society for the Study of Egyptian Antiquities* (Toronto)
LAAA	*Annals of Archaeology and Anthropology* (Liverpool)
L*D*	C.R. Lepsius, ed., *Denkmaeler aus Aegypten und Aethiopien.* 6 vols in 12. Berlin, 1849–58.
Lexikon	W. Helck and E. Otto (later W. Helck and W. Westendorf), eds, *Lexikon der*

	Ägyptologie, 6 vols, Wiesbaden, Harrassowitz, 1975–86.
MDAIK	*Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo*
MDIAAK	*Mitteilungen des Deutschen Instituts für Ägyptische Altertumskunde in Kairo*
MDOG	*Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin*
MM Journal	*Metropolitan Museum Journal*
NARCE	*Newsletter, American Research Center in Egypt*
RdÉ	*Revue d'Égyptologie*
SAK	*Studien zur Altägyptischen Kultur*
Urk. IV	K. Sethe, *Urkunden der 18. Dynastie*. Leipzig, Hinrichs, 1905–9; W. Helck, *Urkunden der 18. Dynastie*. Berlin, Akademie-Verlag, 1955–8.
VA	*Varia Aegyptiaca*
Wb.	A. Erman and H. Grapow, *Wörterbuch der ägyptischen Sprache*. 12 vols in 10. Leipzig, Hinrichs, 1926–63.
ZÄS	*Zeitschrift für Ägyptische Sprache*

Institutional and publisher abbreviations

A&P	Aris & Phillips
AUC	American University Cairo
BM	British Museum
BroM	Brooklyn Museum
BSAE	British School of Archaeology in Egypt
CoUP	Cornell University Press
CUP	Cambridge University Press
DAIK	Deutsches Archäologisches Institut. Abteilung Kairo
EEF	Egypt Exploration Fund
EES	Egypt Exploration Society
GI	Griffith Institute
HUP	Harvard University Press
IFAO	Institut français d'Archéologie orientale du Caire
KPI	Kegan Paul International
MFA	Museum of Fine Arts
MMA	Metropolitan Museum of Art
NINO	Nederlands Instituut voor het Nabije Oosten
OUP	Oxford University Press
T&H	Thames & Hudson
UCP	University of Chicago Press

VOAW	Verlag der Österreichischen Akademie der Wissenschaften
V&R	Vandenhoeck & Ruprecht
W&N	Weidenfeld & Nicolson
YUP	Yale University Press

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Introduction

> The Invention of Consciousness: 'In English we use the word "invention" in two ways. First, to mean a new device or process developed by experimentation, and designed to fulfill a practical goal. Second, to mean a mental fabrication, especially a falsehood, developed by art, and designed to please or persuade. In this talk I'll argue that human consciousness is an invention in both respects. First, it is a cognitive faculty, evolved by natural selection, designed to help us make sense of ourselves and our surroundings. But then, second, it is a fantasy, conjured up by the brain, designed to change the value we place on our existence.'
>
> Professor Nick Humphrey, announcement for a lecture at Wolfson College, Cambridge, 13 May 2016

In the mid-1980s the then history commissioning editor of Routledge, Andrew Wheatcroft, asked me to write a general book about ancient Egypt, which I duly did. I recall a wish somehow to convey an angry feeling that the story of ancient Egypt is simultaneously a record of human achievement in the distant past and a pointer to a future failure of humanity – which is with us now – to face the destructive consequences of many of those achievements. I would like history to be a record of the struggle to be free of the craving for power already evident in the Bronze Age and subsequently twisted into even more awful shapes by fierce creeds and strict ideologies. Progress is there, to be sure, but it is painfully slow, fitful and subject to reversal. Rightness of cause, as seen across the us-versus-them divide, still ensnares too many minds. 'Nationalism and tribalism and faith – these are the driving forces now, and they are tearing apart transnational institutions all over the world.'[1]

Since, however, I had not been asked to write a polemic, my wish broke the surface only occasionally, and the same remains true of this further revised edition. None the less, the longer view which archaeology and ancient history affords does invite one to take stock of how humanity has been faring for the past five thousand years. Remote though one's studies might appear to be, they are of events and processes which are parts of the continuum of which the current world is a product. Many deep-seated aspects of ancient societies have proved to be remarkably enduring, changing their clothes as fashions

have moved on so that they ever seem a natural part of the contemporary landscape. They are mostly to do with collective identity and sources of authority, and especially deserve to be held up to critical scrutiny, for they are often the least benign parts of our inheritance.

In producing a revised edition for the second time I have tried to accomplish several things at once. One is simply an update on discoveries and newer publications, though I have again been less thorough than I should like. Recent years have seen an outpouring of discoveries and studies that requires almost full-time attention properly to embrace whilst, at the same time, my own priority has been continuing field research at Tell el-Amarna (Amarna for short). For the first revision, I responded to a suggestion that the later centuries be included as well, although this is not my speciality, but I have now (again in response to outside suggestions) reverted to something closer to the original scheme. In consequence the book ends with a separate chapter on Amarna.

Seen through the lens of culture

The opportunity to revise is also another stage in personal exploration (and thus something of a luxury), an attempt to clarify the meaning of the studies upon which I have been engaged for over half a century. I have found myself returning time and again to ask myself the question of just what, whether we study ancient Egypt or our own present society, we are really looking at. I find a beginning in the most obvious fact of all. Past and present, we are all – readers of this text and ancient Egyptians alike – members of the same species, *Homo sapiens*, equipped with a brain that physically has remained unchanged since our species emerged. Abundant written sources from ancient Egypt confirm the conclusion that we all share, and have in the past shared, a common consciousness and substratum of unconscious behaviour. We all face the same basic experience, that of existing as a uniquely important individual, looking out into a world that recedes away from the circle of daily life to a wider society of common culture, to more distant and 'foreign' societies lying beyond, all within the context of earth and heavens and the powers of luck, fate, destiny, the will of supernatural (I would prefer to say imaginary) agents and, now that we have become conscious of them, the immutable forces of scientific laws. We search for a theory of

everything. Its components come mixed up together, jostling for attention, and in thought and conversation we flit easily from one to another. We live and keep our reason by virtue of the way that our minds select from the ceaseless flood of experiences that crowd around and flow past us from birth to death and arrange what appears to be significant into patterns. Those patterns, and the responses that we make – fleetingly in speech and more permanently in the shape of institutions and monuments – are our culture. Culture begins as a mental therapy, a filter passed to us from recent generations, to protect us from being overwhelmed by the information that our senses collect, and through it we make sense of the world. On the one hand, therefore, I am trying to be an objective observer, examining evidence from ancient Egypt as if I were a botanist looking at species of ferns. Yet I can only make sense of the evidence by accepting that I myself am part of it, and how I join up the fragments depends upon the fact that I am human, too, living within my own cultural sphere. There is no clear and absolute answer as to where the line should be drawn between too much empathy and too little.

One could argue that, since differences in personality and in local and temporal setting combine to ensure that no two people are ever quite the same, there have been as many cultures as there have been human beings. But in practice culture is a collective phenomenon. Its nature encourages generalization (in which process we, as observers, are easily led to emphasize common features and to gloss over the extent to which people develop their own personal views of the world). A characteristic of being human is a wish to be part of a broader group with a distinctive identity, founded in language, religion, citizenship, guild, local society and so on. Moreover, through hearsay and some of the written and visual signals of culture people imagine that they belong not only to the community which surrounds them but also to a broader 'people' or 'nation' which defines itself, at least in part, by how different it appears to be from others. Shared identity is one of the most powerful and alluring sources of mental order. It provides a ready-made answer to the question: who am I? It also provides a basis for separating myself as observer from the people who are the object of my study. Chapter 1 explores for ancient Egypt what that collective identity was, attempting to separate culture from ethnicity.

Creative minds within the community strengthen the bonds of identity by the exercise of the imagination. They invent (though it might seem at the time to be revelation) myths, symbols and

ideologies which are, in their time, essential knowledge. Ambitious individuals create from the framework a basis of power, establishing systems of conduct which direct the energies and resources of others. The history of the world is not an account of the development of innumerable pools of merging cultures and points of consciousness. It is the record of the subjugation of people to polities of increasing size, ambition and complexity, sometimes with and sometimes without their consent.

The instrument of subjugation is hierarchy, or more precisely dominance hierarchy. This sustains a way of life in which people commonly have unequal access to resources and unequal degrees of authority over others. The balancing mechanism is deference. Deference is an inbuilt scale of sensitivities through which many people find satisfaction in serving those whom they see are more powerful than themselves whilst, at the same time, accepting the services of those less powerful. Deference also, however, co-exists with its opposite, angry rejection of subservience. Dominance hierarchy is common in nature. It is present to different degrees amongst primates, although it is not an automatic consequence of complexity amongst living things. It can be contrasted with a common way of life amongst (for example) ant colonies, in which self-organization or self-management of work arrangements is prominent, allowing worker ants to be, in their varied tasks, interchangeable with one another.[2] Despite what is common in primate societies, for the greater part of the time that fully evolved humans have lived (at least 200,000 years) dominance hierarchy probably barely existed. In their hunter-gatherer groups (of a few dozen individuals) it was (to judge from studies of surviving societies of this kind) kept in check through various forms of sanction that achieved socio-political levelling and thus a way of life in which some measure of equality prevailed.[3] Moreover, the way we give priority to the wielding of power in studies of the past (and present) tends to obscure the power of self-organization which developed human societies also possess. An example (the building of Amarna) will be explored in Chapter 8, which is to be contrasted with settlements where the shape expresses hierarchy (Chapter 5 is largely about examples from the Middle Kingdom).

Signs in the archaeological record of the Near East that groups were breaking away from self-restraint, allowing dominance hierarchies to establish themselves, begin to appear in the ninth millennium BC (though considerably later in Egypt, seemingly by as much as four thousand years). Once started, the process – still the subject of much

speculation – reinforces itself almost irreversibly. Individuals appreciate the scope that exists for ever grander ambitions and, in a time that is short by the timescale of prehistory and human evolution, states begin to appear. States entrench dominance hierarchies not only through the wielding of coercive power but also through the development of specialist groups to whom the power of sanction is delegated: scribes, priests, soldiers and so on. Most inhabitants of a state thus take their place within a system of varied opportunities. The state provides both the most practical framework within which we can study culture, and is, at the same time, one of the most conspicuous aspects of culture. The nature of the ancient Egyptian state and its wealth of devices – myth, symbol and institution – to manipulate minds and to direct the lives of its people are at the centre of this book.

In this way also the lives and views of a whole population are reduced to a singularity. This serves as a great convenience to all, including ourselves when looking at ancient Egypt. In treating them as a bloc we can say 'the ancient Egyptians did this', or we can move to a personification of the kind: 'Egypt in the New Kingdom expanded her empire' (though never 'his empire', at least in the English language). What is at work here is the style of thinking that is unique to *Homo sapiens*: the perspective-taking capacity of the imagination – the ability inwardly to see oneself as an observer of people who are primarily held only within the mind and can be generalized to the point of singularity – and its boundless ability to invent. Together they allow for people, things and abstract concepts to be incorporated within an imaginary world in which they have a role which gives them attributes beyond whatever can be immediately sensed. They have, more precisely, a *transcendental* role.[4]

The transcendental potential of the imagination creates kings from dominant individuals; and not only kings but the abstract concept of kingship, explored and expressed through myth and performance and providing the concept of 'legitimacy', which in turn allows individuals less personally given to dominating others to succeed to the office of king, so helping the maintenance of an orderly society. It creates states and nations from agglomerations of people, and priests from persons who act in a particular way in a shrine (and who, when not doing this, might, at least in ancient Egypt, be a neighbour with whom one otherwise has normal dealings). Each king, each state, each priest is something which gathers in the imagination colourful and ornate characteristics which convey the respect, even awe, inherent within

deference. Moreover, in the imagination these generalized groups can act out dramas, narratives in which dynasties rise and fall and battle honours are exchanged. It helps if named individuals are present, but archaeologists, like social scientists, are used to creating narratives about groups of people who are defined, not by names or personalities, but by their place in society, something which again transcends their individual characteristics.

Generalizing allows dialogue to occur. It also obscures an awkward truth. Variety is an intrinsic part of organic life, in appearance and, when it is present, in consciousness. It provides cats with individual characters, makes political trends hard to analyse and predict, polarizes society on occasion and guarantees that every orthodoxy produces its heresies. The inconsistency, compromise, overlap and fuzzy boundaries that are inherently present in human thinking can be covered up but not suppressed. That covering-up need not be purposely done. The development of a dominant narrative – such as we find in ancient Egypt centred on Pharaoh and his subjects – can unconsciously have the same effect.

Seen through the lens of knowledge: theories of everything

Narratives built around transcendental roles carry us into the realm of myth and thus into the nature of knowledge. We live by myth and should not regard it as standing in opposition to rational knowledge. Myth and rational knowledge overlap when we use phrases like 'I am generally aware of', 'I have a smattering of knowledge of', and try to explain to others (assuming we are not experts) how genes and chromosomes work or what is the nature of electricity. Many of the facts are likely to be wrong, some of the elements misunderstood, and the general picture woefully incomplete. What matters to the teller is that it has the shape of a story and that is what myth really is. Myth is the more obviously story-telling form of what is otherwise metaphor. It pervades the sciences although its presence in a particular form is often not wholly apparent until it has been discarded. The history of the sciences reveals how the imagination includes the essential ability to produce knowledge which, in retrospect, is provisional. It meets the expectations of researchers for a time, but is later seen to be incomplete or even false in the light of further observation and thinking. What are those discarded explanations but myths? Much of

what we think we know is provisional and relies upon our remarkable capacity to join up fragments, find patterns and turn them into stories. Lack of observational knowledge is no hindrance, for invention and myth-making seamlessly fill the gaps. 'Belief' is the acceptance of provisional or unverifiable knowledge.

If I am truthful with myself much of my knowledge of my special field – Egyptology – is of this kind. The sources that I work with are tangible things, 'facts'. They are tombstones in museums, pictures on temple walls, drawings of excavated pots. How they fit into a sensible set of explanations, however, requires a huge amount of creative infilling now embodied in traditions of understanding, nurtured in university departments, which have been growing for more than two centuries. My ancient Egypt remains, none the less, very much an imagined world, though I hope that it is, like a marquee in a wind, pegged to the ground at many points. The pegs in the case of this book are the endnotes which relate my statements to a large body of literature which stores factual information and often instructions as to where, in a museum or at an archaeological site, the original source is to be found. This is the crucial difference between what we might term 'rational myth' – my ludicrously inadequate working-knowledge of nuclear physics, or my better informed but still largely speculative account of, say, the workings of the ancient Egyptian economy – and myth based wholly in the mind, on thought experiments. The history of thought has been of an increasing multiplication of myths, mostly of the former kind, allowing us to choose amongst them, and so giving us the power to discard those that we find inappropriate.

In its craving for knowledge (and thus for complexity of thought) the human mind fills itself with a mix of what is verifiable (e.g. the cost of a goat that is based upon personal dealings with neighbours and in the marketplace; the repeatable experience that, if one follows instructions in a manual of arithmetic concerning the distribution of rations (pp. 177–8), the result is always the same) and what is not but is accepted anyway. This latter is the category of weird knowledge (or magical knowledge) – 'the illusion of something with extraordinary otherworldly properties'[5] – which simultaneously is the price we pay for having, through evolution, developed consciousness, and is the source of our inspirations and goals. In this category comes knowledge of 'the gods', the identification and usually the naming of the parts of a universe which exists within the imagination and is the response to the feeling that the 'world is in fact not what it appears to be, but behind the world of appearances there lies a reality utterly unlike the

world of our senses'.[6] What 'the gods' are is not the same across cultures. Perhaps a definition which recognizes the one thing they have in common is 'imaginary beings to which people ascribe extraordinary properties'.[7]

In developing an understanding of their world Egyptians with an enquiring mind considered its constituent elements. What did and what did not possess an animating force? 'Divine' is a common modern translation of a key word but does not properly correspond to ancient experience, which could, for example, apply the word to the many elements, visible and invisible, of which a human individual was composed, and also to parts of the landscape (e.g. the eastern and western deserts; see below, p. 321). A healer, when preparing to confront an illness, instead of asking for help from the gods, for the moment assumed the identity of some of the most powerful of them in order to make effective threats against the demons of disease. It was as if the realm of the 'divine' were an invisible medium which all Egyptians occupied and which they easily shared with gods and the natural world. Over all knowledge and experience loomed the unstable balance between order and disorder, between justice and fairness and their opposites. In the absence of a more analytical style of thinking which was enriched by sceptical observation of the natural world (it would appear in Greece in the sixth century BC) the Egyptians had little more than the creative power of their imagination. Over the course of three thousand years, in a search for complexity in understanding, they invented richly detailed but fanciful knowledge of the elements of which the universe was composed, and ways in which people could interact with it.

There is a widespread modern view, sometimes illustrated by pie-charts or in the pages of atlases, that the world and its population can be classified according to religion. It reflects the notion, which is of fairly recent origin, that 'world religions' is an important field of study.[8] It can, moreover, be extended into the past, even to ancient Egypt, where 'ancient Egyptian religion' takes its place in a kind of genealogical tree of religions. The subject was initially defined by Christian thinking and then easily developed to embrace Islam. The concept works less well when the net is spread further, particularly to East Asia. What the components of 'world religions' have in common is that they offer a path of understanding, a route to knowledge of the self and to the world as a whole. But so do many other paths, from academic pursuits (even Egyptology) to ideas that attract the term 'alternative', their provability by logic and observation ranging from

zero to the maximum point on the scale (with Egyptology somewhere in between; I hope towards the high-scoring end).

The common habit, to which I have been prey for much of my life, is to put the ancient Egyptians' path (or paths) of understanding under the heading 'religion'. 'Religion' at first sight seems to be a useful descriptive category, one drawer in a cabinet of classification which holds all of human experience. Yet it is difficult to avoid imbuing the word religion, as well as related words such as faith, belief, piety, spirituality and, of course, their opposites, such as superstition and blasphemy, with values that arise from two millennia of life within an official belief system (Christianity) that was, for a long time, forcefully imposed. The energetic promotion of religion for so long has conditioned us to give to its vocabulary (the terms of which presume that the reader shares with the writer a similar deferential feeling towards gods) a particular weight which hinders rational consideration of people like the Egyptians who strove to attain understanding without feeling that they were following a special path. Religion, like so many concepts, can gain in clarity of definition when set against opposites, such as the pairings: religion/atheism, 'true' religion/'false' religion. But when such opposing modes of thought are absent (as was the case in ancient Egypt) 'religion' becomes almost synonymous with 'life'. Why burden oneself with unnecessary terminology? Moreover, the gods that a person recognized – including one's local god, one's 'city god' – were not a strong part of their identity, of the kind that divided one person from another whose imaginative configuration was not the same. Another person's preferences amongst the gods did not create an 'otherness'. Yet this is the characteristic that most marks 'religions' as they subsequently developed and is, on its own, a reason for not defining an Egyptian religion.

The unhelpfulness of conventional vocabulary surfaces in another way. Studies of many modern societies, through census returns and questionnaires, claim that religion (at least in 'western' societies) is waning or declining. But it is not declining into a vacuum of the imagination, which is where religion has its home. It is dissolving into myriad fragments of personal knowledge, in part collected from rational, including scientific, education and in part from the inventions of people's consciousness. In its place is an increasing diffusion of ideas as to what (outside human agency, if anything at all) governs existence and to whom or to what one should offer deference other than idealized or transcendent fellow humans. It is a search for a

theory of everything, of which 'religion' is one version (and this book is my version). The perceptions of the ancient Egyptians were similarly composed, but drawn from a far more limited pool of possibilities, necessarily so because they lived much further back along the path of development of human consciousness and of the creative powers of the imagination.

Ancient Egypt was also part of the world in which monotheism developed. Monotheism is still very much with us. If you accept its central tenet it creates an evolutionary path into which ancient Egypt can be fitted.[9] The figure of King Akhenaten stands out as particularly significant (Chapter 8). The path proceeds from the incomplete revelation of 'false gods' to the truth of a single god defined in a particular way and by a particular group. But other paths developed in the ancient world which eventually were eclipsed by monotheism, but never really went away and have gradually come back and now largely shape people's outlook. They, too, can be seen as ancestral to parts of the broad spread of contemporary personal quests for understanding. One is illustrated by the teaching of the Greek philosopher Epicurus (342–270 BC), known mostly from a long poetic discourse, *On the Nature of Things*, in Latin, of a Roman follower of his philosophy, Titus Lucretius Carus, who is thought to have died around 55 BC. Epicurus accepted that gods existed, as a natural phenomenon and an integral part of the universe, a universe composed of nothing but atoms and voids. They were, however, remote and wholly lacking interest in humans. According to the Epicurean view, 'religion' (Lucretius uses the word *religio*) referred not to belief in gods. That was to be taken for granted. Religion defined human behaviour when, vainly thinking that gods had an interest in people, humans sought to communicate with them and, by means of sacrifice, to influence their actions. (The word 'religion', used in this way, was thus what we might term 'cult'.) Epicureans saw this as foolish and degrading. Moreover, they subscribed to the broadly held view in the classical world that the universe was governed by an interplay of two forces, Love and Strife. 'Both, it would seem, are necessary for the world to flourish: without Love there would be no coherence or continuity, without Strife no activity or new creation. So Love and Strife need to be in balance or harmony. But the universe as a totality needs to cohere, and so the sum of things, we may infer, is the prevailing of Love over Strife.'[10] The philosophy of Epicurus offered the individual a path towards greater understanding based upon close observation of the world, including natural phenomena, and through discussion with

like-minded friends in pleasurable surroundings. Its elitist outlook limited its appeal, so that it is only since the Renaissance that it has quietly taken its place in mainstream culture, at least in the 'west'.[11] It is instructive that, although Epicurians accepted the existence of gods, they are regarded as followers of a philosophy and not of a religion. Their polite acceptance that the gods existed but were powerless cleared the field for a rational universe. Omnipotent gods make this more difficult.

For the ancient Egyptians the gods were also elements of knowledge of the universe. In some texts the Egyptians display an attitude of ironic distance from them. Moreover, the great theme of Egyptian thinking was how the universe stood on the edge of disorder but was saved by the achievement of harmony between its opposing forces, an earlier version (in a different cultural setting) of the opposition between Love and Strife. Although the Egyptians seem not to have had the intellectual clarity of classical philosophers they were mapping a pathway towards acceptance that the universe could be described by naming its parts, which followed cycles of action and reaction in which humans played no part, except in so far as they could, by their personal behaviour, influence the balance between chaos and order. One of the sets of parts which the Egyptians imagined comprised the irreducible elements of the universe took the form of four pairs (male and female) of abstractions. These were given collectively a name which must mean something like 'the Eight Eternals',[12] and for which only tentative translations are possible, as with 'timelessness, inertness, insubstantiality and blackness'; or even simply 'no time, no energy, no mass, no light', the conditions that cosmologists now ascribe to what preceded the 'big-bang' creation of the universe.[13] The male aspects were accompanied by a picture of a frog and the females by a picture of a snake. Elements in the writings point to an underlying concept of wateriness. They came into existence within an imagined initial state, 'primaeval time', by means of a single act of creation by a creator god, Shu (sunlight as it passes through the air). As a piece of abstract speculation on the origin of matter it should command some respect, even though its categories do not coincide with anyone else's, including our own. This impersonal universe had a blurry overlap (which tends to confuse us) with imagined but approachable spirits of particular localities which slowly developed into places which drew in major resources to support a cult (some examples are given in Chapter 3).

Half of the content of religion is knowledge (a theory of

everything) which, with hindsight (as in the case of ourselves regarding ancient Egypt) or from the perspective of the outsider, has emerged wholly within the imagination. The other half is deference, a psychological determinant of dominance hierarchies and evidently what Lucretius had in mind when using the word *religio*. It manifests itself in responses to the feeling of awe when in the presence of superior authority, which is partly visible (kings) and partly in the imagination (gods). With those two concepts – knowledge and deference – the subject area of 'religion' (for which the Egyptians themselves had no word) becomes redundant. 'To explain religion is therefore a fundamentally misguided enterprise. It is rather like trying to explain the function of headlights while ignoring what motor cars are like and for.'[14] And so another change in this revised edition is that I have abandoned the word 'religion' for pre-modern contexts and have been careful in the use of related words. One of them is 'ritual'. In the words of one anthropologist: '"What use does a term [ritual] have which brings together a man shaking hands, a man praying to his god, a man refusing to walk under a ladder, a man clapping at the end of a concert, a man placing medicine on his crops?" As there is almost nothing which such a category would reliably exclude, we can only agree that the answer is, "None at all".'[15]

I do not deny that the Egyptians experienced what is conventionally called religion; far from it. But if one wants to understand the nature of consciousness and its history starting as far back as one can (and ancient Egypt offers some of the world's earliest direct sources), then 'religion' is an unhelpful partition to introduce into the continuum of knowledge; it is an obstacle and a distraction.

Seen through the lens of human agency

When looking at human societies, behind our imagined views of them, our extreme generalizations and the stories that historians compose, there lies a reality that is altogether very hard to come to terms with: the endless variety that generalizations obscure. A society is a system composed of all of its people, in the case of ancient Egypt somewhere between one and three million of them. As people they are individuals and within the system they are agents, each and every one, living within a matrix of opportunities for interaction. Yet no two are exactly the same, they are not equal performers. If we take one of the simplest physical attributes, body height, and plot a graph for how it varies in

a population, we will find that most people's heights will group together towards the centre of the graph, but that increasingly fewer people will have heights which register further and further towards the taller and shorter extremes. The graph will shape itself like the profile of a bell. What is true for height is true for everything else, from assertiveness to resistance to illness, from intelligence to athletic prowess, from being motivated more by altruism or by selfishness (although it seems in this case that the 'bell' is skewed more towards the positive attribute of altruism). Each person is situated at a particular point on an innumerable array of curves which describe different human characteristics. Moreover, from population to population the norms themselves vary, whether they concern body height or willingness to die in a cause, and within the same population some degree of variation is to be expected over time and as circumstances change. In considering the themes of this book, an important variable is interest in complexity within the mind. In some people a mixture of exploration and invention creates complex explanations for the nature of their existence; in others less so or hardly at all.

With each individual possessed of a unique set of attributes, people act out their lives within their opportunity space, at the very least with the purpose of survival and often of improvement to their lot. They unwittingly exchange illnesses, they communicate information, from gossip to revelations, they seek to emerge with satisfaction from a transaction, even if that transaction consists only of getting across a point of view. It is something one cannot avoid: lying low and attempting to do nothing is itself an act with repercussions, especially if many people choose that course. Yet that matrix of opportunities for interaction – normal human life for a population – is far from being an even field. People are born into family groups which are themselves lesser systems and which, over the years, waver between increasing their standing and their property as a unit and subdividing again into new families, sometimes through disputes. The process tends to be self-cancelling. One family's promotion is likely to be at the expense of another's decline so that a general degree of equilibrium maintains itself, but sets of circumstances arise – good fortune for those involved – which propel one family beyond normal expectations to a more longer-lasting prominence, perhaps even, in traditional societies, to the founding of a ruling house. Those few individuals in which, say, the urge to excel and dominate is unusually strong (Rameses II perhaps, and, of course, Akhenaten), will have a measurable effect on

the system as a whole and might, for a brief time, drive it in a new direction or beyond its previous boundaries. But the system remains, albeit in an altered state, preserved through memory and cultural tradition. Families are only one kind of lesser system, and perhaps more influential in the past than now. Institutions are another kind, and ancient Egypt possessed many. Most conspicuous (to us) were the royal court, the many temples and, in the later centuries, the army. They take a prominent place in Chapter 6. But also of great importance in the lives of many, especially in the earlier periods, were patriarchal families based in provincial centres who at least outwardly articulated the combination of local authority and moral responsibility for their communities. The heads of such families often identified themselves with titles which we translate as 'mayor' or 'nomarch' (*nome* being a Greek word for a unit of provincial government).

As the full population of the country constantly interacts, the system which they inhabit does not remain stable, as if it were a pot of water endlessly simmering on a low heat. It develops complex swirls of activity that, described at an instant of time, form the profile of that society. When followed over time, changes in the system's configuration are seen to feed back and become in turn influential, to tiny or to large extents, producing self-reinforcing trends. We first see it in Egypt in the emergence of the state towards the end of the fourth millennium BC (Chapter 2). Certain patterns recur, but not in a way that is wholly predictable. Collective behaviour, which becomes history as the years pass, takes a non-linear course. Causality becomes hard to follow. If we keep to the metaphor of the simmering pot and substitute oil for the water, and turn up the heat, we will see the oil develop structure, in the form of visible hexagon-shaped flows which disperse the heat more rapidly. Those structures have their human counterparts in changes in belief and behaviour that usually come to our attention only by the time that they are fully formed and their genesis is lost.

How a mass of individuals interacts within a system in a way that becomes a fragment of history is apparent in modern stock markets in which, day by day, many thousands of transactions are made, each involving an element of judgement by the human actors or agents (or by computer-based algorithms constructed to follow their logic). Moods of confidence and uncertainty are the self-reinforcing factors. On seeing that many others are buying or are selling in a determined way, an individual is very likely to join them. In consequence of such herding behaviour, broad movements in favour of expansion alternate

with broad movements in favour of contraction, the oddly named 'bull' and 'bear' markets. The stock market is measured daily in a single way, through the value of the individual stocks and of the companies whose credibility they represent, so it is possible to model and to simulate it with computer programs which incorporate the mathematics of complex non-linear systems.

Why is this not done for contemporary society as a whole? To have an adequate working model, constantly updated, ought to be hugely useful to social scientists, to politicians and to people who sell things. In the years that have passed since I wrote the first version of this Introduction the shadowy outline of such a scheme of universal monitoring has begun to appear as people have voluntarily linked themselves to networks of electronic communication (and become subject to involuntary schemes of monitoring). One publicly acknowledged scheme of archiving is that of the Library of Congress of the USA, which announced in 2013 that approximately 170 billion public 'tweets' had already been collected; around 400 million new ones are said to be created each day.[16]

Through this quantity of source material (doubtless to be extended and enhanced as time passes) will the focus of history writing alter? Contemplating just the possibility brings home how, for the more distant past, history cannot be anything other than a colossal approximation, a crude puppet-show. This does not prevent it from being both instructive and enjoyable, but it is important not to lose sight of the fact that the more we choose a narrative style of history, locate heroes and villains, identify causes and generally tell a good story, the more we veer towards soap opera and away from contemplating the infinitely complex human biomass that is a society and that is, in reality, almost beyond our reach.

Perversity and disorder

Embedded within the myriad points of consciousness which lie at the heart of a population is the one factor which makes any study of human behaviour, whether it is ancient history or the modern stock market, so resistant to precise modelling and prediction even if we are armed with adequate data. That factor is perversity, the human manifestation of the tendency of the universe towards disorder. Whilst one direction of human endeavour is towards inhabiting a stable system – a cosy home in a harmonious community under a benign

government, at every level a triumph of order over chaos – it stands constantly in tension with jagged moments or long-nurtured schemes of rejection. In most parts of the world the past five thousand years is a documented record of perversity and conflict. It has not been just the clash of armies. Fears of disorder and of alienation in a hostile world were a theme of thoughtful ancient Egyptian literature as far back as the early third millennium BC,[17] and from time to time Egyptian society took on a more fragmented mode which promoted internal conflict. These are the so-called Intermediate Periods of ancient Egyptian history. In the end what remained of Egyptian culture was not destroyed by conquerors but from within. In the early centuries AD enthusiastic Egyptian adherents of Christianity rejected their cultural inheritance altogether (by that time a mix of the Pharaonic and the Greek) and celebrated, in tales to encourage the faithful, the smashing up and burning of what survived of old knowledge and places of cult. Indeed, what mostly characterizes the history of humanity as a whole since the Neolithic is the conscious search for improved systems, and their simultaneous or subsequent compromise and even rejection. People are forever seeking to wreck and dismantle what others have built up or even what they themselves, in another mood, will approve of. Triumphs bring mockery, the tragedies of others provoke relish, and iconoclasm destroys what others revere. It is not a simple cleavage into good and evil, for it is perversity which equally undermines inhumane and unpleasant systems. And it is through dissatisfaction that innovation arises.

What long-term function does contrary behaviour serve? Why are people so perverse? The creation of orderly regimes has been a regular aim of government since very early times, and it is very noticeable in ancient Egyptian sources (Chapters 4 and 5 deal with this). Why then are we not more ant-like than ants themselves? That many people evidently find the idea of a safe, ordered but at the same time controlled existence unwholesome only underlines the puzzle: why do we not *like* the idea of living an ordered and perhaps very comfortable hive-like existence?[18] In the long run, it seems, complacency is an unsustainable condition, and hard-won stability an abhorrence. When a time of tribulation has passed, people grow bored with consensus and prosperity. One answer comes from within the scientific community. There is a view that the 'purpose' of all activity including that of life itself is to disperse the universe's energy towards an ever greater number of possible states, in effect towards uniformity, and

that complex ways do this ever more effectively. Life steers itself towards ever more ambitious combinations of turbulence and complexity which yet require at the same time the constraints of order against which to react. This is the great paradox of existence. Everything provokes its opposite; everything needs its opposite in order to survive.

What is meant by energy when spoken of in the context of human societies and their history? We might think first of the more intensive production of food than would happen in nature and the use of natural resources generally; the creation of societies in which material expectations rise and population numbers increase so that the levels of exploitation also rise in turn; the picking on weaker neighbours, especially when, from the ashes of war, societies are renewed. But underlying them all is perversity itself, the wish for change born from dissatisfaction with the old and the attraction of something new. Over the past two thousand years the most powerful releasers of energy have been bodies of newly formulated knowledge which excite extreme deference to real and imagined figures (tyrants and gods) and which are simultaneously destructive and creative, which wreck an old order and seek to build a new one in its place.

Thoughtful Egyptians, very early in their history, seem to have appreciated this endemic tension in the world as they saw it (it is the basis of Chapter 2). The theme of order versus chaos is embedded within Egyptian thinking and produced some startling written portrayals of chaos let loose in the world. Within their universe order and chaos faced each other. Yet even though chaos had its myriad demons, everything was constrained towards an underlying harmony which affected mankind (mostly Egyptian 'mankind') through an acceptance that social ordering was part of the scheme, an aspect which was transferable to daily life and involved the role of the king. In the end, order – the Egyptian concept of *maat* – prevails and stands in the place of unrule and so the outlook is optimistic.[19] A phrase from the philosophy of science, 'systems standing on the edge of chaos', well describes the Egyptian world-view. Again, emphasizing the need to separate the symbolic language (which we are bound to find strange) from content, this seems to be a reasonable working model to have at the back of one's mind in contemplating what goes on in the world.

Reduced to this absolute level history becomes a tale of increasingly flamboyant ways by means of which energy is dispersed. If the outcome were to be wholly destructive then that end would be

thwarted. Sufficient of what has evolved and developed must survive to allow the play – gaming is a powerful metaphor here – to move on and to rise to levels of ever greater complexity. A positive outcome of some sort is inherent in the process. It is thus entirely normal that society as a whole should experience progress, and equally normal that disruption and setback should be an inescapable accompaniment. The problem for the historian is that the preliminaries to times of change – they are not really 'causes' – lie almost wholly unrecorded within populations whose societies serve as the playing field on which moods and ideas, opportunities and reactions to external factors endlessly compete for winning energy-consuming outcomes. We, as observers, arrive after each particular game has reached its end and know only the result and the names of a few players but not the myriad details of the play itself. One can sometimes pick out what seem to be causes for moments of drama – the ending of the Old Kingdom in Egypt is an example – but these can only be simplifications of quickening alterations in the patterns in which energy is being dispersed by the population as a whole. In this case perhaps a long stability was moving towards inertia and, in a reaction spontaneously taking shape, in the minds of sufficient people a preference developed for a more dynamic kind of society, in this case one which replaced a single central government with competing local centres of patriarchal authority, so bringing about armed conflict (which was, in effect, a re-run of the process of state formation). Thus is the First Intermediate Period described, its release of energy at the local level having as one local consequence the expansion of some towns, a picture not in accord with past assessments of the time which focus on 'collapse'.[20] No matter how elegant our construction of how the events played out in the fine details of who did what, the underlying reason why history took its particular course is that the background mood was in a state to respond in a particular way; the time was right. Fantasies of violent change are wired into the human mind, yet most calls to arms fall flat because the time is not right, and most prophets and would-be rulers of the world pass their lives unheeded. A complete history would be one which explains why an infinite number of possible outcomes did not happen.

Summary of content

In the scheme I have chosen, the first part (Chapters 1–3) serves to

introduce the ancient Egyptians and the processes by which their culture and their state came into being. In essence it is a narrative of conflict resolution. The second part (Chapters 4 and 5) examines the processes at work which expressed an urge towards refining the degree of order that had already been achieved within society. It is about conscious efforts to improve the means of control. The third part (Chapters 6–8), by drawing largely on evidence from the New Kingdom, explores the complex balance that was achievable, when energies were directed peacefully towards refashioning the state and violently towards the conquest of neighbours. Chapter 8 also highlights the brief rule of Pharaoh Akhenaten who was driven by a wish – perverse in its time – to think critically about the central model of the universe that the Egyptians had developed.

I have wanted to convey the scope that frequently is there for more than one interpretation of the evidence, and what the limits are to the inferences that we can draw. And, in seeing myself as more an archaeologist than any other kind of enquirer, I have tried to make archaeological sources speak a little more loudly than they often do in books about ancient Egypt. Some will find the result idiosyncratic. But all should bear in mind the likelihood that survey and excavation in Egypt will continue indefinitely to bring in new archaeological evidence, especially evidence for the histories of local communities. By contrast, seeing how the rate of discovery of new written sources declined sharply during the twentieth century, the current stock might well represent most of what we will ever have.

The Egyptian setting in space and time

Egypt's civilization developed in one of the largest arid desert areas in the world, larger than the whole of Europe. It was possible only because of the River Nile, which crosses an almost rainless desert from south to north carrying the waters of Lake Victoria nearly 7,000 km (just over 4,000 miles) to the Mediterranean Sea. In ancient times Egypt was just the last 1,100 km (700 miles) of this waterway, the stretch that begins at modern Aswan and the set of rapids known as the First Cataract. Along most of this course the Nile has scoured a deep and wide gorge in the desert plateau, and then built on its floor a thick layer of rich dark silt. It is this deep carpet of silt which has given the valley its astonishing fertility and transformed what might have been a geological curiosity, a version of the Grand Canyon, into

a densely populated agricultural country.

The Nile valley proper ends in the vicinity of Cairo, capital of Egypt since the Arab invasion of AD 641. To the north the river flows out from the valley into a large bay in the coastline, now entirely choked with the same rich silt, to form a wide, flat delta over which the river meanders in two branches, the Damietta on the east and the Rosetta on the west. In earlier times the branches numbered more than two. The delta now represents about two-thirds of the total arable land in Egypt. The striking twofold division into valley and delta creates a natural boundary for administration particularly when viewed from Cairo or its ancient forebear, the city of Memphis. The ancient Egyptians recognized this by giving to each part a distinctive name and treating them as if they had once been independent kingdoms. These names are conventionally translated as 'Upper Egypt' for the valley, and 'Lower Egypt' for the delta.

This is, however, an oversimplification. Upper Egypt has its own internal division in the vicinity of Asyut. This is apparent partly from observing the course of history, which has tended to reveal this division at times of internal weakness, and partly from topography. North of Asyut the west bank becomes broader, the western cliffs fade into a low escarpment, and the land is watered not only by the main course of the river but also by a winding parallel offshoot, the Bahr Yusef (Figure 0.1). Because of its distinctive character the term 'Middle Egypt' is often used for the valley north of Asyut. The delta is topographically much more of a unity, but nevertheless tends to be seen by its inhabitants as having an eastern and a western side, the former joining the vital land-bridge to Asia across the Sinai Peninsula.

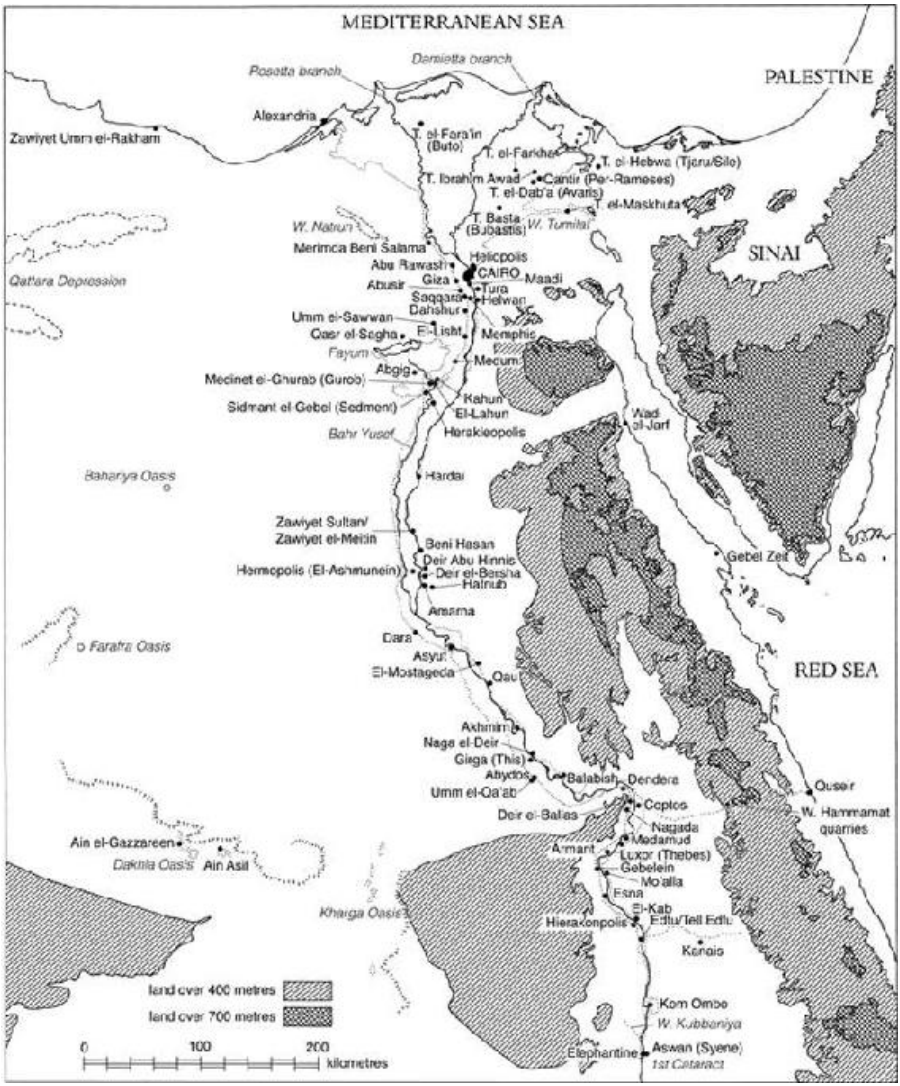

Figure 0.1 Map of the northern Nile valley marking places mentioned in the text.

The arable lands of valley and delta today present a flat, unvarying landscape of intensively cultivated fields, crossed by irrigation and drainage canals, and studded with towns and villages half-hidden by groves of palm trees, and increasingly displaying signs of rapid growth and modernization. Concrete has replaced mud brick. The transition from fields to desert is still, none the less, abrupt and striking. Civilization visibly ends along a clear line. On the east the desert plateau above the valley gradually rises to a distant range of jagged hills and mountains bordering the Red Sea, while on the west it stretches for a distance of more than 4,800 km (3,000 miles) to the Atlantic Ocean, a silent, windswept land of gravel and sand.

The Nile receives two tributaries, the Blue Nile and the Atbara, both rising in the high, mountainous plateau of Ethiopia. The heavy summer rains in Ethiopia swell enormously the volume of these tributaries, and sweep down them a heavy load of sediment, rich in minerals. Since the middle of the nineteenth century AD, by a series of dams, this annual surge has increasingly been held back and controlled. Before that it was sufficient to flood the Egyptian valley and delta, transforming the country into a long shallow lake, towns and villages remaining on low islands linked by causeways (Photograph 0.1). As the current was checked some of the silt settled on to the land and was left behind when the waters receded in October and November. If crops were then sown in the thick wet mud, the moderate sunshine of autumn and winter would have ripened them by March or April with little or no need for further watering. Then, after the harvest in summer, the ground dried and cracked, enabling aeration to take place, which prevented water-logging and the excessive accumulation of salt. These three seasons formed the basic divisions of the ancient Egyptian calendar: *Akhet* (inundation), *Peret* (growing), and *Shemu* (drought).

Photograph 0.1 View of the city of Asyut at the height of the inundation, photographed early in the twentieth century. From L. Borchardt and H. Ricke, *Egypt: Architecture, Landscape, Life of the People*, London, Orbis Terrarum, 1930, 120.

It was an ideal natural cycle but one that human ingenuity could still do much to improve. Earthen banks could be raised to enclose large basins where the farmer could allow the waters to remain for a period before releasing them back into the river. Water could be raised mechanically to irrigate areas above the normal reach of the flood, or in summer, when the river was at its lowest, to irrigate the fields for a second crop or to maintain kitchen gardens through the year. Beyond this the waters of the Nile could be spread further and more efficiently by the creation of a system of irrigation and drainage canals, controlled by locks, and ultimately, as has been the case since the opening of the High Dam at Aswan in 1970, by damming back the flood and letting it out gradually so that the river level remains constant and never overflows its banks. In building up a picture of ancient society it is necessary to consider how far along this path of improvement the Egyptians went.

The answer appears to be: not very far. The need was not there. The idea of using the fertile land to grow cash crops to be sold for profit abroad (as developed in the nineteenth century AD) was far from the ancient way of thinking. Population grew only slowly and by the time of the late New Kingdom had probably not exceeded 3,000,000, a very modest total by today's standards (official statements currently put Egypt's population increase at 1,000,000 every six months). When we examine the ancient sources they suggest a very elementary picture of land management. The state remained very interested in the annual yield of the land for the purpose of collecting rents and taxes: this much is clear from written sources. But the same sources say little or nothing about irrigation. The implication is that this was a local matter outside government control. It suited everyone concerned to maintain the banks around the basins, and the annual filling of these by the flood left sufficient moisture in the soil for a single grain crop. There was a professional interest in the maximum height of each year's inundation. Records of this were carved on suitable markers: Nilometers or temple quays. But there is no evidence that the figures were used in calculations to assess crop yields, although people must have been very well aware of the consequences of flood levels either much higher or much lower than the average.

Modern irrigation in Egypt involves not only regulating the flow and availability of water from the Nile via networks of canals, but also the use of machines for lifting it up to ground level. Nowadays the machines are pumps driven by electricity or by fuel oil. The ancient

Egyptians had only the *shaduf*, a device of simple construction, a pivoted, horizontal pole with a counterweight at one end and a bucket or its equivalent suspended at the other (Figure 0.2). It is shown in tomb scenes from the late Eighteenth Dynasty (*c*. 1350 BC) onwards, but even then only in scenes of men watering gardens. In earlier versions,from before this time, the method was even simpler. We see water brought to gardens in pairs of pottery jars slung from yokes on the shoulders of men (Figure 0.3). In such scenes we are clearly dealing not with the irrigation of farmland for the production of a main crop of cereal or flax, but with the watering of only a limited amount of land out of reach of the flood, and confined to vegetable- and flower-beds and orchards maintained all the year round. This evidence serves to reinforce the argument that main-crop cereal agriculture was a matter of a single annual crop dependent upon moisture left in the soil after the inundation.

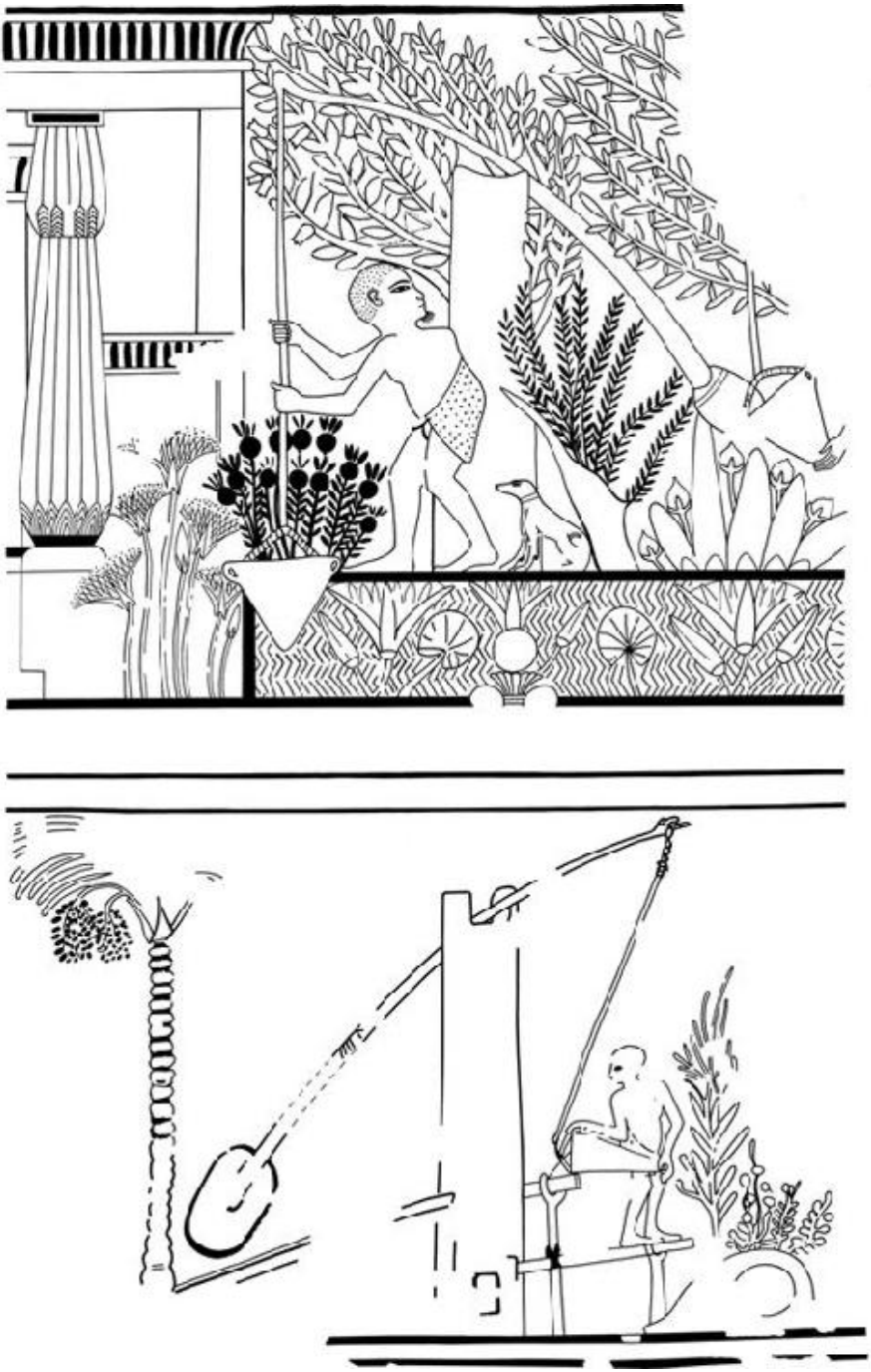

*Figure 0.2*Cultivating perennial gardens and orchards: the improved New Kingdom method, using a *shaduf*. The top scene shows a simple *shaduf* being used to irrigate a garden beside a shrine. The man (his dog behind him) stands on the bank of a canal and pulls down the vertical pole to dip the suspended bucket into the water. The long pivoting beam of the *shaduf* rests on a tall brick pillar, and has a rounded counterweight of mud at its opposite end. The bucket of a second *shaduf* is being

emptied at the right-hand edge of the picture. Tomb of Ipy (no. 217 at Thebes), *c.* 1250 BC, after Davies, *Two Ramesside Tombs*, Pl. XXIX. In the bottom scene, a more complicated *shaduf* is shown in operation. It stands beside a well, at the right-hand edge of the picture, over which projects a platform for the operator. This man is emptying the bucket into a raised trough (presumably of wood) which passes through the brick *shaduf*-pillar and runs down to irrigate an orchard. Tomb of Neferhetep (no. 49 at Thebes), *c.* 1325 BC, after N. de G. Davies, *The Tomb of Neferḥotep at Thebes*, New York, MMA, 1933, Pl. XLVI.

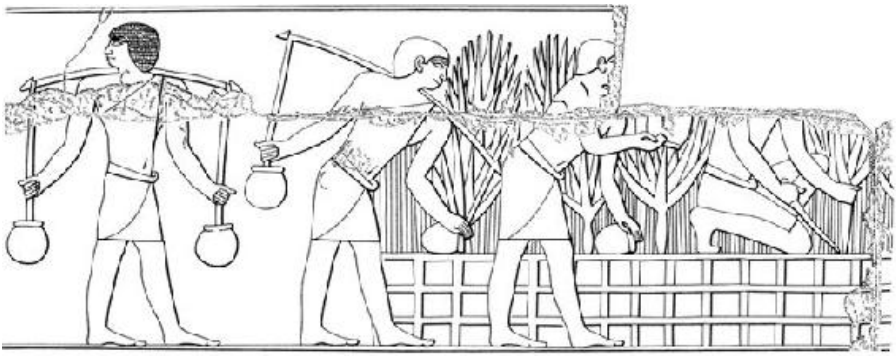

*Figure 0.3*Cultivating perennial gardens: the original method. Water is carried to the square growing-beds in pairs of pottery jars suspended on wooden yokes. On the right a man kneels planting a lettuce in a hole made with a stick. Tomb of Mereruka, Saqqara, *c.* 2300 BC, after P. Duell, *The Mastaba of Mereruka* I, Chicago, IL, UCP, 1938, Pl. 21 (redrawn by B. Garfi).

The importance of appreciating this is not just that it provides the background picture to life in ancient Egypt. It has sometimes been thought that organized society – civilization – in Egypt and elsewhere arose from the need for collective effort to control rivers to allow agriculture to develop. In the case of ancient Egypt one can state that this was not so. The origin of civilization is not to be sought in something so simple (a consideration of this subject is at the heart of Chapter 2). It is true that modern Egypt is maintained by an elaborate irrigation system. This is necessary, however, only because of the development of agriculture as a business, and on account of the massive increase in population that has occurred in the past two centuries.

Modern Egypt is an Arabic-speaking country, predominantly Islamic in culture, and secular in its civil law code and most institutions, the product of 1,300 years of Arab rule and influence since the first Arab invasion of AD 641, modified by the country's Mediterranean position. Even by the time of the Arab conquest, however, the ancient Egypt of the Pharaohs lay far in the past. The conquest of Egypt by the Iranian (Persian) Great King Cambyses (525–

522 BC) brought Egypt into the multicultural Achaemenid empire for a century during which Aramaic became the language of senior administration. The conquest by Alexander the Great in 332 BC initiated three centuries of rule by Macedonian kings (the Ptolemies), who managed to live in Greek style in Alexandria whilst still posing as Pharaohs for the benefit of the more traditionally minded parts of the country. The last of the line was Queen Cleopatra VII (*the* Cleopatra) through whose policies Egypt became, in 30 BC, a province of the Roman empire. We can formally recognize the end of ancient Egypt in the reign of the Roman emperor Constantine (AD 306–337). His conversion to Christianity and his support of the organizational role of the church in society had a profound effect on Egypt, which became a fervently Christian country. The Christian legacy in modern Egypt is the Coptic Church. Its language, no longer spoken but preserved in liturgy and in scriptural translations, is the language of ancient Egypt shorn of hieroglyphic writing (and conveying a very different message).

Infusions of outside culture – primarily Hellenistic Greek, Christian and Arab – effectively destroyed the indigenous Nile valley culture of ancient times, sometimes by a process of gradual modification, sometimes by deliberate attack. Modern knowledge of ancient Egypt is, therefore, the result of reconstruction by scholars. It has two main sources: the study of ancient evidence revealed by archaeology, and (before the decipherment of hieroglyphs in AD 1822) the careful reading of the accounts of classical times, some of which were made by Greek visitors during the last centuries of Pharaonic rule, and some written from within the country. In the early days of Egyptology one of the latter provided a ready-made framework of history and chronology, which is still universally accepted. It is a set of summaries of a now-lost History of Egypt written in Greek in the third century BC by an Egyptian priest, Manetho. Despite inaccuracies introduced by copyists, Manetho's access to temple archives gave his work a degree of detail and authority which has stood the test of time. In particular, his division of Egyptian history into 30 dynasties, or ruling families (to which a thirty-first was subsequently added), still provides the basic framework of history. For convenience, however, modern scholars have grouped Manetho's dynasties into broader units, as follows (with modern date estimates and an occasional hiatus or overlap amongst the ruling groups):

Early Dynastic Period (Dyns 1–2) *c.* 3085–2584 BC

(or Archaic Period)
Old Kingdom (Dyns 3–6) 2584–2117 BC
First Intermediate Period (Dyns 7/8–mid-11) 2117–2040 BC
Middle Kingdom (Dyns mid-11–13/14) 2040–1650 BC
Second Intermediate Period (Dyns 15–17) 1650–1549 BC
(includes the Palestinian 'Hyksos' Dynasty in the north of Egypt)
New Kingdom (Dyns 18–20) 1549–1069 Bc
Third Intermediate Period (Dyns 21–24) 1064–721 BC
Late Period 721–332 BC
Kushite (Sudanese)/Assyrian rule (Dyn. 25) 752–656 BC
Saite Period (Dyn. 26) 664–525 Bc
First Persian Period (Dyn. 27) 525–405 BC
Local dynasties (Dyns 28–30) 404–342 BC
Second Persian Period ('Dyn. 31') 342–332 BC
Conquest by Alexander the Great 332 BC
Ptolemaic Period 332–30 BC
Death of Queen Cleopatra VII 30 BC
Roman Period 30 BC–AD 395
Egypt ruled from Byzantium (Constantinople/Istanbul) AD 395–641
Arab conquest of Egypt AD 641

Before the First Dynasty came a period of Neolithic/Chalcolithic culture often called the 'Predynastic'. For the Predynastic Period of Upper Egypt more than one set of terms has been developed for the succession of individual cultural phases. An older scheme ran from the Badarian, through the Amratian to the Gerzean and then, via a somewhat ambiguous transition, to the First Dynasty. Subsequently Amratian and Gerzean were generally replaced by the terms Nagada I and Nagada II, which still left the transitional period undefined. A redivision was proposed some years ago which recognized three Nagada phases: I, II and III (III overlapping with the First Dynasty), further subdivided by the use of capital letters (e.g. IIC), and this has become the standard terminology (with the retention of Badarian). They are, however, phases of culture, defined by styles of pottery and so on. It is clear from a political point of view that, with the last century or two of the Predynastic Period, we are dealing with 'kings', and a useful general term for them is 'Dynasty 0'.

For absolute dates from the end of the Second Dynasty onwards I have used the chronological table in A. Dodson and D. Hilton, *The Complete Royal Families of Ancient Egypt*, London, T&H, 2004, 287–94. Revised radiocarbon dates for the Predynastic Period and for the kings of the First Dynasty will be found in M. Dee, D. Wengrow, A.J. Shortland, A. Stevenson, F. Brock, L. Girdland Flink and C. Bronk Ramsey, *Proceedings of the Royal Society* A (4 September 2013), http://

rspa.royalsocietypublishing.org/content/469/2159/20130395; M.W. Dee, D. Wengrow, A. Shortland, A. Stevenson, F. Brock and C. Bronk Ramsey, *JAS* 46 (2014), 319–23. These dates are a result of statistical modelling of data from fresh samples newly measured, the samples chosen from transition points between successive predynastic phases, followed by tight sequences from individual reigns of the First Dynasty. The 'peaks' of probability are as follows:

Start of the Badarian	4350 BC
Transition to Nagada I	3750 BC
Transition between Nagada IB and IC	3650 BC
Transition between Nagada IIB and IIC	3450 BC
Transition between Nagada IID and IIIA	3325 BC
Beginning of First Dynasty	3085 BC
Beginning of Second Dynasty	2850/75 BC

Notes

1The words are those of US politician Pat Buchanan, quoted in www.bbc.com/news/world-35152027, dated 26 December 2015.

2L. Keller and É. Gordon, *The Lives of Ants*, Oxford, OUP, 2009, 56–9.

3I have found Benoît Dubreuil, *Human Evolution and the Origins of Hierarchies: the State of Nature*, New York, CUP, 2010 to be useful in reflecting on this topic; also the review by Catherine Driscoll, *Biology & Philosophy* 27 (2012), 125–35 = http://link.springer.com/article/10.1007/s10539-011-9266-2.

4Bloch, 'Religion' places great emphasis on this.

5N. Humphrey, *Soul Dust: the Magic of Consciousness*, London, Quercus, 2011, p. 71.

6O.E. Lowenstein, 'The Pre-Socratics, Lucretius, and modern science.' In D.R. Dudley, ed., *Lucretius*, London, Routledge & Kegan Paul, 1965, 1–17, p. 3.

7As a definition (the wording is mine) I prefer it to one cited by Russell Powell and Steve Clarke, 'Religion as an evolutionary byproduct: a critique of the Standard Model.' *British Journal for the Philosophy of Science* 63 (2012), 457–86, p. 458, n. 1: 'Cognitive scientists of religion often refer to "minimally counterintuitive agents" to describe postulated beings that would be described more casually as "supernatural"' (p. 458, n. 1). I thank Hans Barnard for this reference. 'Metapersons' is another suggestion.

8Brent Nongbri, *Before Religion: a History of a Modern Concept*, New Haven, CT, and London, YUP, 2015 treats this theme in some detail. T. Insoll, ed., *Archaeology and World Religion*, London and New York, Routledge, 2001 is one study that takes it for granted that the subject is viable, though admitting (pp. 3–10) the near-impossibility of finding a common theoretical framework.

9The subject continues to attract scholarly interest, e.g. J.K. Hoffmeier, *Akhenaten, His Religion and the Origins of Monotheism*, Oxford and New York, OUP, 2014; J. Assmann, *From Akhenaten to Moses: Ancient Egypt and Religious Change*, Cairo, AUC Press, 2014; B. Pongratz-Leisten, ed., *Reconsidering the Concept of Revolutionary Monotheism*, Winona Lake, IN, Eisenbrauns, 2011.

10Richard Jenkyns, 'Introduction', in *Lucretius: the Nature of Things*, translated and with notes by A.E. Stallings; introduction by Richard Jenkyns. Penguin Classics.

Penguin Books, London, 2007, vii–xxiv, p. xii; see also S. Gillespie and P. Hardie, eds, *The Cambridge Companion to Lucretius*, Cambridge, CUP, 2007.

11 In *The Swerve: How the Renaissance Began*, New York, Norton, 2011; London, Vintage, 2012, S. Greenblatt narrates how a Papal secretary, Poggio Bracciolini, discovered a manuscript copy in a monastery probably in central Germany in 1417, copied it and began the process by which it eventually became part of the mainstream of modern knowledge.

12 A city in Middle Egypt (called by the Greeks Hermopolis) took its name from this Eight configuration, the name for which was Khemnu, which survives in the name of the modern village on the site, El-Ashmunein. The sources are very brief, without significant narrative: Faulkner, *Coffin Texts* I, 77–87, Spells 76, 79 and 80; Allen, *Genesis in Egypt*, 18–21; F. Dunand and C. Zivie-Coche, *Gods and Men in Egypt: 3000 bce to 395 ce*, Ithaca, NY, and London, CoUP, 2004, 49–50; R.T. Rundle Clarke, *Myth and Symbol in Ancient Egypt*, London, T&H, 1959, 54–5.

13 I owe this last phrasing and idea to Corinne Duhig.

14 Bloch, 'Religion', 196, who also comments (p. 188) 'anthropologists have, after countless fruitless attempts, found it impossible to usefully and convincingly cross-culturally isolate or define a distinct phenomenon that can analytically be labelled "religion"'; also M. Bloch, 'Is there religion at Çatalhöyük ... or are there just houses?' In I. Hodder, ed., *Religion in the Emergence of Civilization: Çatalhöyük as a Case Study*, Cambridge, CUP, 2010, 146–62. I also wrote Kemp, *All that Matters* with the same convention in mind.

15 C. Humphrey and J. Laidlaw, *The Archetypal Actions of Ritual: a Theory of Ritual Illustrated by the Jain Rite of Worship*, Oxford, OUP, 1994, reprinted in 2004, 66, quoting J. Skorupski, 1976. *Symbol and Theory: a Philosophical Study of Theories of Religion in Social Anthropology*, Cambridge, CUP, 1976, 131. 'Ritual', when used to describe the behaviour of people living a traditional way of life, is often attached to the word 'dancing'. But is there such a thing as non-ritual dancing?

16 See http://blogs.loc.gov/loc/2013/01/update-on-the-twitter-archive-at-the-library-of-congress/, http://firstmonday.org/ojs/index.php/fm/article/view/5619/4653 and www.politico.com/story/2015/07/library-of-congress-twitter-archive-119698.html.

17 Parkinson, *Poetry and Culture*, Ch. 9.

18 Even ant colonies are not quite what they seem. Research reveals that social insects, bees and ants alike, are latently anarchic but are for the most part held in check by policing strategies which are genetically controlled: L. Spinney, 'Anarchy in the hive!' *New Scientist* 15 January 2005, 42–5; http://bio.kuleuven.be/ento/pdfs/spinneynewsci2005_anarchyinthehive.pdf?id=mg18524821.900, articles prompted by Keller and Gordon, *The Lives of Ants*. Ch. 25, 'Caste Struggles', briefly covers the topic of 'police workers'.

19 The idea that optimistic outcomes underlie human behavior as part of the natural order and possibly show up in Egyptian calendars of lucky and unlucky days is explored in B.J. Kemp and P.J. Rose, *CAJ* 1 (1991), 103–29.

20 Moeller, *Urbanism*, 219–46.

Part I

Establishing identity

1

Who were the ancient Egyptians?

Books about ancient Egypt take for granted that the ancient Egyptians were already, in essence, a nation. It is natural to say that the Egyptians believed in such and such a thing and acted in a certain way. Modern historians, however, might not altogether agree and ask: 'Are you sure? Are you not being naive?' For they tend to see the concept of nationhood and national consciousness as having begun in western Europe in the eighteenth century, and as having been somehow linked to the decline in the power of religion. Nationhood is, from this point of view, to be contrasted with large cultural systems that preceded it, in particular the 'religious community' and the 'dynastic realm'. Mediaeval Europe supplies the pre-modern norm. Christianity and the Latin language, and the transfers of rulership of huge swathes of territory through dynastic marriages and conquests, created loyalties and enmities that transcended boundaries of shared inheritance and common language. Henry II, King of England (and Wales), spoke French as his first language and owned and ruled almost the same amount of territory in France. This seems the antithesis of circumstances in which nationhood exists. Another example, very relevant to Egypt, is the Ottoman Empire which, in its heyday, extended from Budapest to Baghdad, from Cairo to the Caspian Sea and held within its embrace many diverse societies, separated by language and local history. What unified them was Islam, the Arabic language (and to a lesser extent the Ottoman language of state business), and loyalty to the Sultan and to his representatives. Only in the wake of its collapse came the assertion of local identities which either transformed themselves into nations (as with Greece and Egypt, and the Ottoman heartland of Turkey) or have struggled to do so through more than a century of communal violence, particularly in the Balkans and more recently in Syria and Iraq.

Collective identity is an ancient, deeply felt, and sometimes murky attribute of humanity. It begins on the very local scale, and much of human history is concerned with its evolution although, as pointed

out in the Introduction, the move from hunter-gatherer groups to societies in which dominance hierarchy was the rule is thought to have begun relatively late and has proceeded with different degrees of intensity and on different scales ever since. Nor is the nation-state necessarily the final grouping. Beyond it lies the potential of transnational or transregional groupings which have been achieved in the past (often in the form of empires). India, the USA and China are examples of very large territories that have managed to become 'natural' units. The voluntary union of European states aspires to something like this status (and also illustrates the point that moves towards harmony engender perverse opposites, in the shape of national political movements dedicated to weakening it). Furthermore in the 1960s the short-lived political unions linking Egypt with Syria, Iraq and Libya (to create a United Arab Republic) had the same aim. We still live in a politically transitional time.

The imagined community

Central to the concept of the nation is

> an imagined political community … It is *imagined* because the members of even the smallest nation will never know most of their fellow-members, meet them, or even hear of them, yet in the minds of each lives the image of their communion.[1]

People live in a world of their imagination whilst simultaneously negotiating daily realities. By this definition of the nation ancient Egypt passes the test reasonably well. The ancient Egyptians, speaking and writing a common language, occupying a territory with a well-catalogued geography centred on the Nile valley and subscribing to a distinctive culture, imagined themselves as a single community. Central to that imagined community – and it is here that we meet the principal difference from modern nationhood – is that it was presided over by a line of divine kings, Pharaohs. Yet we should not emphasize this difference too much, for Egypt had an existence separate from Pharaoh, and rulers were heavily obligated to maintain the integrity of 'Egypt'. They served it and were 'the herdsmen of mankind', the latter term meaning, of course, Egyptians (just one version of the conceit that anthropologists have found to be widely spread in the world of tribal societies; that is, 'we' alone are synonymous with true humanity). Moreover, kings owed their own unique position to the

continuing existence of the country called Egypt that they ruled and of its wealth of traditions. The line of the Pharaohs and all the marks of their legitimacy to rule continued through the first millennium BC, even though by then the holders of the office were mostly of foreign origin, from Libya, the Sudan, Assyria, Persia, Greece and Rome.

The imagined community of the nation contrasts itself with the world outside. 'We' are special, 'they' are inferior and do strange things. The sense of community in the modern world is developed and maintained by diverse means, including the reading of newspapers the editorial policies of which promote national identity, most strongly by disparaging foreign peoples and nations. The Egyptians took pleasure in this kind of thinking, too. We meet it well developed in a piece of ancient Egyptian fiction, the Story of Sinuhe, a tale of temporary exile in Palestine endured by a courtier of the early Twelfth Dynasty who feels the need to flee as a result of accidental implication in a conspiracy to thwart the royal succession. The assumed readership is the Egyptian literate class and, although seemingly composed around 1950 BC, the story was still being copied as a school exercise seven centuries later.[2]

To leave his country, Sinuhe has to creep by night past the frontier fortress named 'The Walls of the Prince', which, he states, 'was made to repel the Asiatic and to crush the Sand-farers' (i.e. the Bedouin). Close to death in the desert he is rescued by one of these very same people, a passing cattle nomad who offers hospitality. In his subsequent exile in Palestine he exchanges his persona as an Egyptian courtier clad in fine linen for that of the head of a tribe, and is eventually forced to adopt the role most antithetical to that of the Egyptian scribal elite, the warrior who becomes the hero of personal combat. Despite his local success, there is no mistaking the sense of longing for the distant homeland, which is both a place and a community, namely Egypt. 'Come back to Egypt!' are the very words of the king's subsequent personal advice. At the heart of this longing is the thought that Egypt is the only proper place in which an Egyptian can be buried. Much emphasis is placed on this. To ease the pain of exile, the Palestinian ruler who befriends Sinuhe tellingly remarks on the linguistic aspect of community: 'You will be happy with me; you will hear the language of Egypt', evidently from other Egyptians who, he states, were already with him. Eventually, pardoned by a benign king, Sinuhe returns to Egypt, to an enthusiastic welcome and to a self-indulgent shedding of the taint of foreignness: 'Years were removed from my body. I was shaved; my hair was combed. Thus was

my squalor returned to the foreign land, my dress to the Sand-farers. I was clothed in fine linen; I was anointed with fine oil. I slept on a bed.' And a magnificent tomb with a gilded statue in its chapel was made for him at the king's expense.

It is all there: geographical frontiers, language, dress, bodily cleanliness, even sleeping on proper beds; and were not Egyptians lucky to be ruled by so powerful yet benign and generous a king? By these marks Egypt was defined as a nation, which could still be imagined in these terms centuries later as the text was copied and read. It should be noted, none the less, that Sinuhe's picture of the 'Asiatics' is essentially a kindly one. They might be uncouth, but they behave with honour and kindness. They do not commit acts of savagery. Sinuhe inhabits a world, or at least a literary dimension, of civilized manners.

The term which Sinuhe uses throughout for 'Egypt' (*Kmt*) means literally the 'black land'. In other sources it is often contrasted with the 'red land', as in the reference to a mythical partitioning between the gods Horus and Seth: 'The whole of the Black Land is given to Horus, and all of the Red Land to Seth.'[3] It is thus reasonable to understand the pairing of the two terms as a contrast in basic soil colour: the black soil of the alluvial plain of the Nile and the sands and rocks of the desert which Egyptians included within a colour term which we conventionally translate as 'red' but which really embraced a wider palette. As for themselves, the Egyptians often used a term which is sometimes to be appropriately translated 'the people' (as in 'people of Egypt' in Sinuhe) or more broadly as 'mankind'. It made them the centre of the universe; they were the norm. In a myth recorded in several royal tombs of the New Kingdom 'mankind' rebels against the ageing sun god Ra, who is called 'the King of Upper and Lower Egypt'.[4] From his wrath they flee into the desert and are there pursued to destruction by an avenging goddess whose lust for blood is assuaged by red-pigmented beer being poured over the fields as if it were an inundation of the River Nile. The imagined location is clearly Egypt and 'mankind' are the Egyptian people. As the norm of humanity Egyptians as 'mankind' were to be contrasted with specific groups who lived in the other parts of the world known to them. At the furthest limits were the inhabitants of Punt (modern Eritrea) who were said to 'know nothing of mankind'.[5]

Egyptians delighted in type-casting their subdivisions of foreigners, and did so with deft stylization (Figure 1.1). By means of clear conventions of classification, using facial shape, skin colour and dress,

they identified particular groups: Nubians, Asiatics, Libyans, peoples from the Aegean, and from the eastern Sudanese/Eritrean land of Punt. These stereotypes came to life again in the nineteenth century AD as western scholars began to record the ancient monuments and thus to explore the ancient Egyptians' world through their eyes. It produced, for a while, a mood of over-confidence, in which the ancient Egyptians' portrayals of foreigners were regarded as almost photographic representations of 'racial types', a subject then high on anthropologists' research agenda. 'The same form of head is characteristic of the Armenian to-day, though with a larger nose' was one such early twentieth-century comment on a relief at the temple of Abu Simbel.[6] We have become more cautious with the evidence since then.

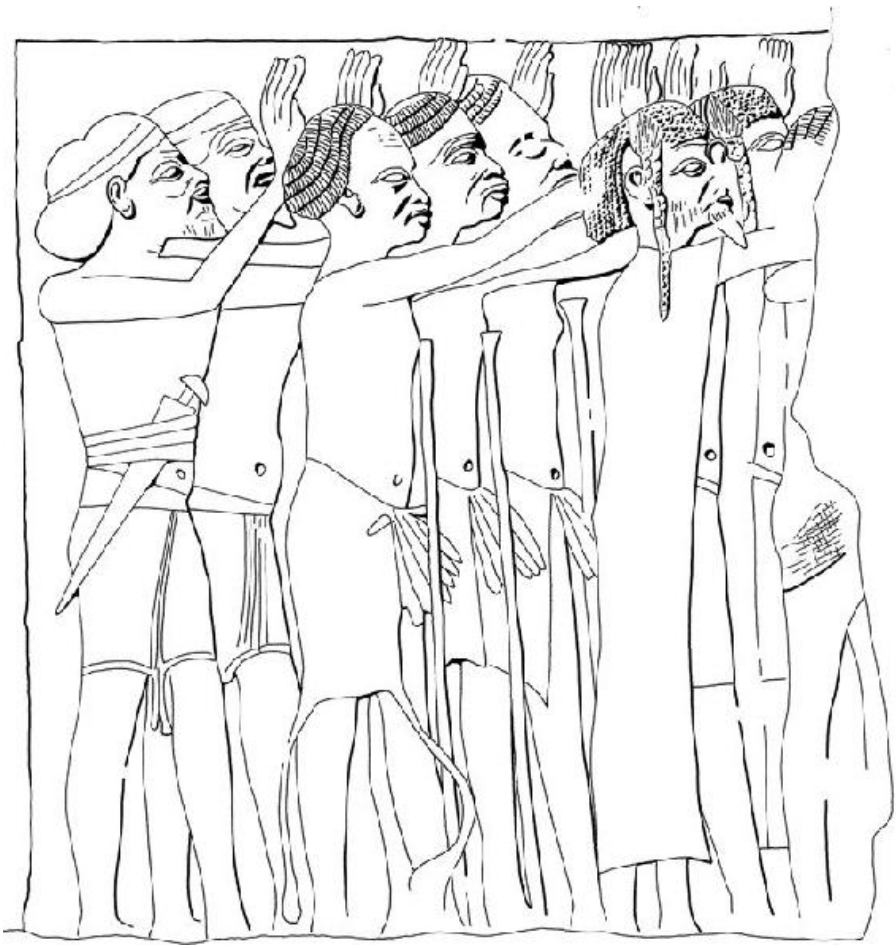

*Figure 1.1*Foreigners in the Memphite tomb of Horemheb (*c*. 1320 BC) at Saqqara. From left to right, in three groups, Asiatics, Nubians and Libyans. After G.T. Martin, *The Memphite Tomb of Ḥoremḥeb, Commander-in-Chief of Tutʿankhamun* I, London,

EES, 1989, Pls 116 and 117.

To complement racial stereotyping the Egyptians from time to time expressed demeaning opinions. 'The Asiatic is a crocodile on his bank. He snatches from a lonely road. He cannot seize from a populous town' is part of the advice of one king to his successor (Merikare, *c.* 2050 BC).[7]

> A coward is he (any Egyptian king) who is driven from his border, for the Nubian responds to the tone of voice. To answer him back is to make him retreat. Attack him, and he will turn his back. Retreat, and he will start attacking. They are not people to respect. They are wretches, craven-hearted …

announces King Senusret III on his southern boundary stela at Semna, in Nubia (*c.* 1870 BC).[8] Libyans who, in the time of Rameses III, threatened Egypt (*c.* 1170 BC), are made to admit their folly after their defeat:

> We have heard it said of Egypt from the time of our father's father: 'She is the one who breaks our back'. We have begged our own death by our own choice. Our very own legs have carried us to the fire.[9]

More often, the foreigner, when in the position of a foe, is simply designated by an adjective which seems most appropriately translated as 'vile'.

From pictures and words of this kind – and the examples are very numerous – we might paint a picture of the ancient Egyptians as racially exclusive. By the first millennium BC outsiders were already claiming this to be so. The Greek travel-writer and historian Herodotus, observing that 'no Egyptian, man or woman, will kiss a Greek, or use a Greek knife, cooking-spit, or cauldron, or even eat the flesh of a bull known to be clean, if it has been cut with a Greek knife', put this down to Egyptian distaste of any people who were prepared to sacrifice cows, sacred to the goddess Isis.[10] In a similar tone the Jewish historians who put together the Old Testament around this time or even later, in composing their parable-like tale of Egypt and Israel, explained the seating arrangements for a meal at Joseph's house by saying: 'for the Egyptians cannot eat with the Hebrews, for that is detestable to the Egyptians'.[11] To what extent these are

themselves caricatures made to pander to the intended home audiences is now hard to tell. For by contrast, sources from within Egypt point to a much greater variety of Egyptian response to foreigners in day-to-day affairs.

Building frontiers

The Egyptians attempted, by means of border controls at the corners of the delta and across the Nile in the south, to check the immigration of the Asiatics, Libyans and Nubians. The 'Walls of the Prince' which Sinuhe had to avoid was one such control. It has yet to be identified with an archaeological site, but its probable successor in the New Kingdom, by then named Tjaru (Sile), has been located at Tell el-Hebwa on the east side of the modern Suez canal (Figure 1.2; see also the map, Figure 1.10, p. 43).[12] From a few reigns later than Sinuhe the massive fortifications which the Egyptians erected to mark their southern frontier at Semna in Nubia survived to a remarkable degree until the 1960s (for notes and a plan see pp. 234–6 and Figure 5.22). A short text inscribed upon a stone tablet by the king who built them (*c.* 1873 BC) makes their purpose explicit:

> The southern boundary which was created in the 8th year under the Majesty of King Senusret III to prevent any Nubian from passing it when faring northwards, whether on foot or by boat, as well as any cattle of the Nubians. An exception is a Nubian who shall come to barter at Iken (a fortified trading-post), or one with an official message.[13]

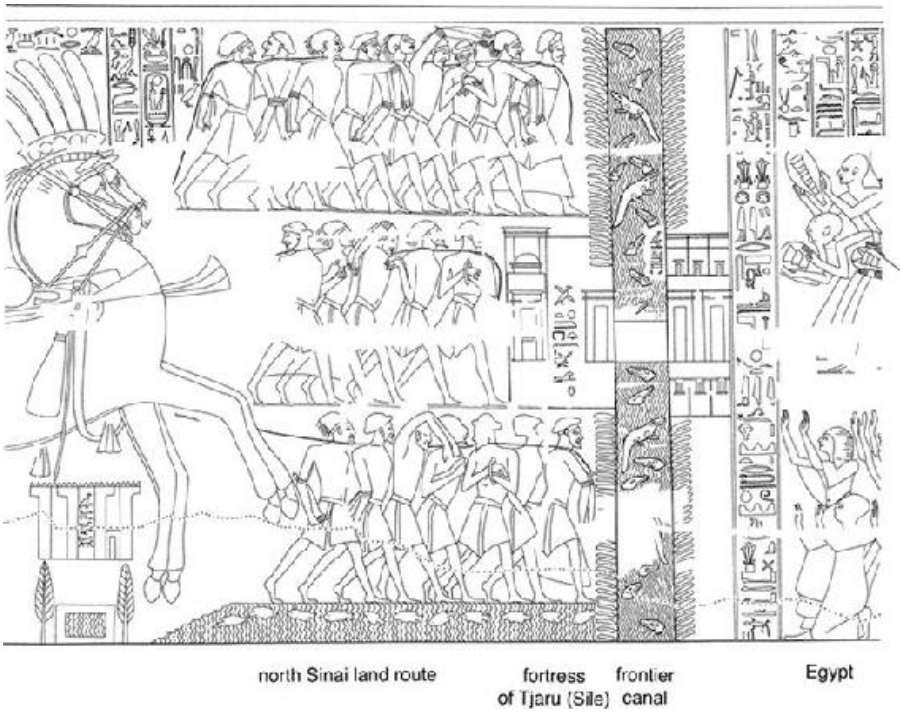

*Figure 1.2*The frontier defences in the north-eastern Nile delta, depicted in part of the battle reliefs of Seti I at Karnak, Nineteenth Dynasty, *c*. 1290 BC. The scene captures the ambiguity of such defences. The fortress and the crocodile-filled canal are to keep out foreigners who wish to enter Egypt of their own accord, but when captured and under Egyptian control the same foreigners are herded across to be forcibly settled in Egypt. The hieroglyphic label within the fortress in the bottom left corner reads: 'The lion's den'; that within the buildings on the left side of the canal: 'The fortress of Tjaru (Sile, the site ofTell el-Hebwa)' (note its Window of Appearance at the top); that actually within the borders of the canal: 'The dividing canal'. Waiting to greet the returning king are the 'chief priests and mayors of Upper and Lower Egypt.' After The Epigraphic Survey, *The Battle Reliefs of King Sety I*, Chicago, IL, UCP, 1986, Pl. 6, with additions (including all below the dotted line) from nineteenth-century AD copies provided by A.H. Gardiner, *JEA* 6 (1920), Pl. XI.

This is an echo of an even earlier text (an entry on the Palermo Stone, *c*. 2590 BC) which records 'building the wall of the south- and north-land (called) "the mansions of Sneferu"'.[14]

When immigrant pressure in the west, from Libyan tribes, became acute in the Nineteenth Dynasty and was supported by landings of raiders from across the Mediterranean, a line of fortified settlements was constructed along the Mediterranean coast westwards from the Nile delta.[15] On the other side of the delta, in the reign of Merenptah (*c*. 1212–1201 BC), a fortress controlled the eastern end of the Wadi Tumilat which offered an entry point from a more southerly crossing of the Sinai Peninsula (the text is translated below).

None the less, it was not feasible to surround the whole country with a wall. There were innumerable entry points from the deserts to east and west and, of course, it was also possible (as Sinuhe did) to sneak past the border posts which did exist and which lay across commonly used routes of access. Their effectiveness depended to some extent upon patrolling the desert around them. One ancient witness to this practice is a papyrus roll of neat copies of letters sent to a central office (perhaps at Thebes) from Semna and from other fortresses which were spaced along the Nile in Nubia. One topic concerns a people whom the Egyptians called the Medjay and who lived in the valleys of the eastern desert. The Egyptians employed some as desert trackers as they sought to collect intelligence about the movements and intentions of strangers. One letter reports that a little group of other Medjay had been brought in for questioning; another that a different group of two men and three women had approached one of the forts asking for employment but had been sent away again.[16] Surveillance is the subject of a model letter included in a scribe's set of practice pieces which deals with the fortress mentioned above at the eastern end of the Wadi Tumilat (Tjeku: perhaps the archaeological site of Tell el-Maskhuta; see the map, Figure 1.10, p. 43):

> We have finished letting the Shasu tribes of Edom pass the fortress of Merenptah which is in Tjeku en route to the pools of Pi-Tum of Merenptah which are in the province of Tjeku, in order to sustain them and sustain their flocks through the good pleasure of Pharaoh … I have sent details to the place where my lord is, as well as other dates when the fortress of Merenptah in Tjeku was passed.[17]

It was acceptable to let them in for a while, but then to keep watch over them.

Opening the gates

These measures reflected a wish to control those who might enter and pose a threat to the lives and property of Egyptians. They did not aim to keep the country racially separate. Demeaning generalizations about foreigners and attempts to bar them from entering did not express absolute values but were heavily dependent upon context.

Whatever their sense of superiority, Egyptians did not translate it into exclusion laws or into customs and behaviour which formed an effective barrier. Throughout its history Egypt took in and absorbed outsiders. For one thing, they could be useful. Through the recruitment of soldiers and through the capture of prisoners on foreign campaigns the numbers of those brought to the Nile valley who were available for the (to the scribal elite) distasteful tasks of fighting and labouring were swelled. Transferred to the Egyptian side, the cowardly foreigner became a valued warrior.

In the direction of Nubia, to the south, and towards the adjacent deserts, the practice of recruitment to serve in Egypt began at least as early as the Old Kingdom. Commissioned to raise a national army to counter a threat in Palestine, the high official Weni (reign of Pepi I, *c*. 2265–2219 BC, a classic 'scribe' who bore civil and not military titles) extended his demand for soldiers beyond the provinces of Egypt to the peoples of five named Nubian homelands (one of them, Medja, the homeland of the Medjay, probably in the eastern desert) and of 'Libya', a conventional modern translation of a vague term for the western desert. Whether, when released from military service, they returned to their homes or settled in Egypt the source does not tell us. But the continuing presence of Nubians in Egypt as a recognizable group who could, in a reversal of roles, actually force Egyptians to work for them was recognized by a royal decree of the same period which gave protection against them (they are called 'friendly Nubians', which might actually also translate as 'Nubian mercenaries') as well as against a wide range of others who might prey on the property belonging to certain established temples.[18]

Perhaps a century and a half later still, a group of Nubian bowmen were settled upstream from Thebes, in the vicinity of Gebelein, where a number of them were buried. Our only means of identification are small gravestones, the idiosyncratic hieroglyphs of which point to a date in the First Intermediate Period (Figure 1.3, *right*). They identify themselves as Nubians by sometimes using for themselves the clear Egyptian ethnic term for those who lived in the Nile valley south of Aswan, 'Nehesy' (which gave rise to the personal name Panehsy/ Pinehas). They are shown with bushy hair, darker skin colour, and a distinctive sash which hangs down the front of their kilts. They carry bows and arrows and are sometimes attended by dogs. As riverine Nubians their cultural background is well known from excavations in Nubia itself and is distinctive. Some traces of it have been found to the north of Elephantine (Kubbaniya and Hierakonpolis are two sites,

perhaps Gebelein is a third). In most of the material necessities of their lives they must have used things of Egyptian style, including the carved and inscribed gravestones furnished with the standard Egyptian offering-formula. Even further to the north, an Egyptian nobleman of this same time (First Intermediate Period), named Mesehet, included within his tomb at Asyut wooden models of a troop of Nubian archers and another of Egyptian spearmen (Figure 1.3, *left*). We identify them as Nubians on account of the darker paint used for their skin and their costume, but nothing from local archaeology has so far identified the presence of a Nubian population.[19]

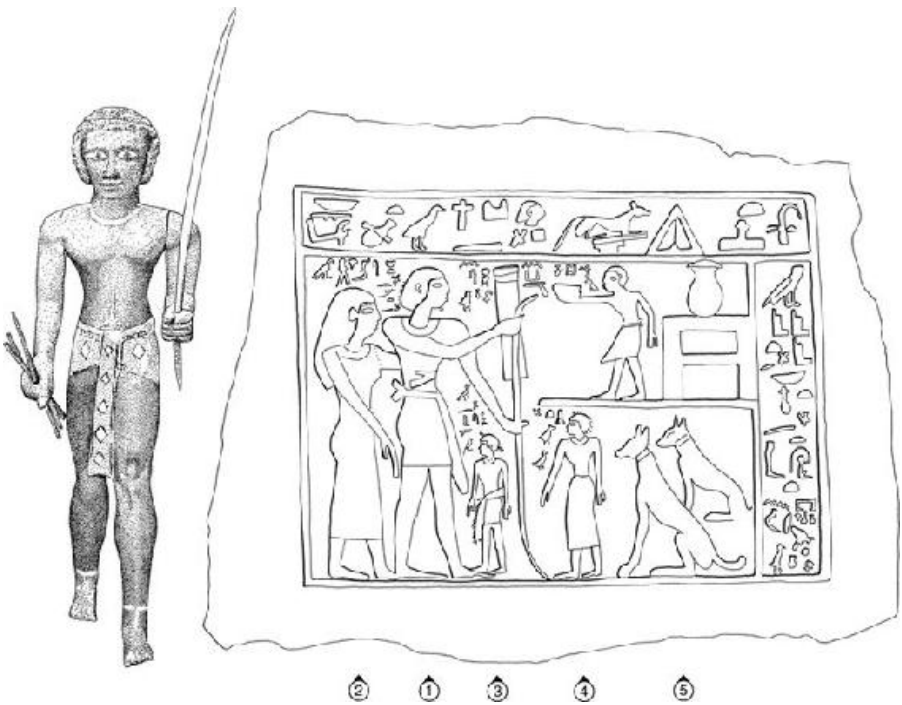

*Figure 1.3*Nubian bowmen locally employed in Egypt in the First Intermediate Period. *Left*. One of the figures (35 cm high) in a wooden model of a Nubian troop, from the tomb of Mesehet, Asyut (Egyptian Museum, Cairo, CG 257). His skin colour is a darker red than that of Egyptian spearmen in a companion model from the same tomb. Whilst the latter wear a white, undecorated loincloth, most of the Nubian garments consist of a red loincloth held in place with a green-blue waistband, over which is tied a broad red sash the ends of which hang down the front. Both the loincloth and the sash are decorated with large diamond shapes. There is sound archaeological evidence for interpreting the colour and decoration of the loincloth and sash as deriving from myriad tiny coloured beads stitched to a cloth backing. After M. Bietak, in Posener-Kriéger, *Mélanges Gamal Mokhtar*, Taf. IIIa. *Right*. Limestone tomb stela from Gebelein (Museum of Fine Arts, Boston, MA, 03.1848), 37 cm high. The hieroglyphs identify the owner (1) as a Nubian (Nehesy). He carries a bow and a bunch of arrows, dots around the edge of his hair distinguish it as tightly curled (as with figure no. 4), and he has a long sash over his loincloth. His

wife (2) stands behind, and a son (3) in front, whose sash is shown as with a fringe. Behind him is a Nubian woman (4), perhaps a daughter, and two dogs; above (5) a 'butler' presents a drinking-bowl. The skin colour of (1) and (3) are a darker red than that of the butler (5), who is presumably an Egyptian. Both women are given a yellow skin colour. The hieroglyphic names are not easy to read but seem to be, in part, Egyptian. After H.G. Fischer, *Kush* 9 (1961), 57.

These are examples, and they occur repeatedly, of a basic aspect of the archaeology of ancient Egypt. Even if immigrants retained for a time their own style of dress and other habits, and perhaps their own language, they tended rapidly to abandon the kind of cultural markers which survive best on archaeological sites, most particularly their own pottery. The history of the important subject of immigration has to be written largely from texts and from artistic representations, neither of which provides anything like a continuous and representative record.

From periods prior to the New Kingdom come sporadic records of Palestinians ('Asiatics') in Egypt, too. Some were brought as prisoners of war. A granite slab from the temple of Memphis (the Mit Rahina Stela), in recording court events of the reign of Amenemhat II (*c*. 1932–1896 BC), states that one campaign netted 1,554 'Asiatics'; another reference (to the same group?) deals with the dispersal of 'Asiatic women'.[20] One consequence of such dispersals is to be found in a papyrus (now in the Brooklyn Museum, USA) of the Thirteenth Dynasty (*c*. 1745 BC) which includes a list of slaves in a large household, probably that of the vizier Ankhu. There were originally 95 of them, for whom the slightly damaged text preserves the names and/or 'titles' of 79, two-thirds of them women. More than half of the names are preceded by the masculine and feminine variations of the word 'Asiatic' (i.e. 'Asiatic man'/'Asiatic woman'). In the remaining cases the term used is either 'king's servant' (male) or 'servant' (female), an indication that they are Egyptians. Already some of the Asiatics had taken the first steps towards assimilation. Eight of the Asiatic women are listed as having with them a son or daughter who bears an Egyptian name. One of the boys, whose Asiatic mother also bore an Egyptian name, is stated to have been the son of a 'skipper' whose non-ethnic designation and Egyptian name probably identify him as an Egyptian, too.[21] A later part of this book (Chapter 5, pp. 211–21) describes the large planned Middle Kingdom town of Kahun, a royal foundation. That, too, supported contingents of Asiatics, male and female. This is known from papyri, but their presence is not to be deduced independently from archaeology.[22]

In the New Kingdom foreign campaigns were pursued with greater

vigour and probably on a larger scale. The battle texts gloat over the massacre of enemies and of the terror they feel when the Pharaoh attacks. Those who were captured, however, immediately became assets, were carefully counted and were sent back to Egypt to become part of the property of the Pharaoh, or of the temples (virtually the same thing), or of men rewarded for their bravery by the king with gifts of prisoners. A temple text describes Rameses II (*c*. 1279–1212 BC) as the king 'who carries off the land of Nubia to the Delta, and the Asiatics to Nubia. He has placed the Bedouin (Shasu) in the land of the west and has settled the Libyans (Tjemehu) in the hill country (the east).'[23] Something similar is said of Rameses III (*c*. 1185–1153 BC) concerning the Libyans, who, once captured, were 'made to cross the Nile, transported into Egypt and turned into garrisons of the victorious king'.[24]

Initially, at least, they could be kept together in ethnically distinct camps. Two stelae from the mortuary temple of Tuthmosis IV (*c*. 1398–1388 BC) record the foundation of settlements for prisoners captured by the king, one group from the Palestinian city of Gezer and another from the Nubian lands of Kush. His son, Amenhetep III (*c*. 1388–1348 BC), surrounded his mortuary temple with settlements of Hurrians (Palestinians?), whilst a place name at Memphis, 'field of the Hittites', perhaps derived from another such camp.[25] Rameses III, in summarizing his achievements, adds telling details about the fate of captured groups: 'I established their leaders in strongholds bearing my name. I appointed among them chiefs of bowmen, leaders of the tribes, (they being) branded – made as slaves – with the cartouche of my name; their wives and children were treated similarly.'[26]

To assess the impact which this process had on the overall population of Egypt we need some indication of scale, although numbers from ancient texts are notoriously difficult to use with confidence. We have already encountered 1,554 as the number of 'Asiatics' captured on a Middle Kingdom expedition. Papyrus Harris I lists the following donations made by Rameses III to the temple of Amun: Syrian and Nubian settlements containing 2,607 persons; to the temple of Ra: 2,093 chariot-warriors and others (including Aperu, a Palestinian people); to the temple of Ptah: 205 Syrians and Nubians; and also a general donation of 971 Libyans (Mashwash) for looking after herds.[27] We cannot, of course, check the reliability of these numbers. They are, however, hardly likely to be underestimates given that the purpose of the text was to record the achievements of the recently deceased king. Yet although hardly overwhelming they have

to be set against the relatively small population of Egypt in antiquity. On a larger scale Merenptah (*c*. 1212–1201 BC) claims to have netted from his Libyan war, as its principal batch of captives, an apparent total (the text is damaged) of 9,376 persons.[28] Even larger figures are given for the second Palestinian campaign of Amenhetep II (*c*. 1424–1398 BC) (Memphis Stela), totalling around 100,000, including 36,300 Hurrians. Although they are said to be 'plunder which his majesty carried off', the numbers are sufficiently disproportionate to raise the suspicion that they are guesses at the total numbers of the populations involved. For one thing, if all were brought back and settled in Egypt the problems of dispersal and support would have been huge, given that this figure is around one thirtieth of the total population (of around 3,000,000) which has been estimated for Egypt at this time.[29] A rare example with numbers from an even earlier period is the result of a Nubian campaign of King Sneferu (*c*. 2520–2470 BC) of the Fourth Dynasty recorded on the Palermo Stone: 7,000 captives (as well as 200,000 sheep and goats).[30] If one chooses to accept the figure then one can make the case that this was a move to boost the labour force needed for the exceptional building programme of Sneferu, which embraced two major pyramids at Dahshur and a third at Medum.

One can form the impression that at times, and in places where large groups of people were gathered to work on great projects, especially monumental building, foreigners would have predominated (Figure 1.4). One witness document is a work record scribbled on a flake of limestone, which tells us that a gang labouring with stone blocks for a temple in western Thebes in the reign of Tuthmosis III (*c*. 1479–1424 BC) comprised 60 Palestinians and only 20 'men' (i.e. Egyptians).[31]

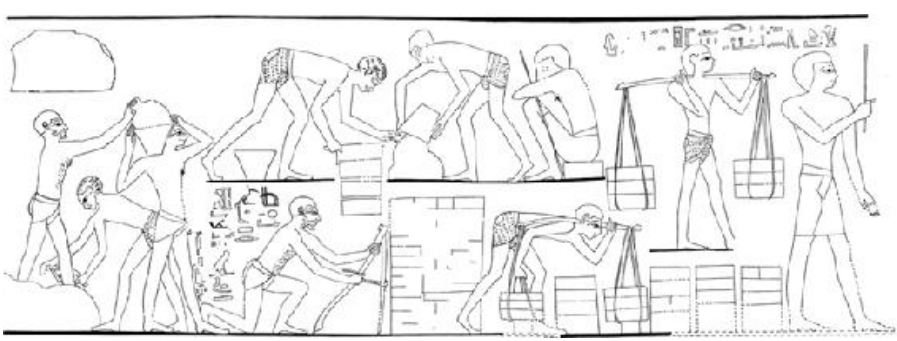

*Figure 1.4*Brick-makers (left) and bricklayers and carriers (centre and right) as depicted in the tomb of the vizier Rekhmira, mid-Eighteenth Dynasty. The text on the right reads: 'The captives which His Majesty brought back for the projects of the

temple of [Amun]'; the text to the left of the middle reads: 'Making bricks to rebuild the workshops [of Amun] in Karnak'. The modern copyist of the scene commented: 'Fair-skinned Syrians with blue or red (for brown) eyes mingle with darker Nubians, whose hair is dyed (?) red or blue and whose loincloths are of leather, and with others who are scarcely distinguishable from Egyptians', adding that the blue eye colour could stand for grey. After Davies, *Rekh-mi-rē*', 54–5, Pls LVIII, LIX; colour Pl. XII.

Where the battles were in Palestine and Syria, the captured places and defeated armies belonged, as was the case in Egypt, to societies in which some people were under obligations to work in servitude (whether or not we consider the term 'slavery' to be appropriate; see the discussion below, p. 180). For some of the prisoners, therefore, capture will have meant only an exchange of masters. The process continued in times of peace, when people from the same areas were sold into captivity in Egypt, although when numbers are cited they are relatively small. The annual tribute of 'Syrian slaves' listed in the annals of Tuthmosis III at Karnak varies between 51 and 702.[32] Some of the Amarna Letters of the late Eighteenth Dynasty, which are likely to be more realistic than temple texts, occasionally mention slaves either as gifts to the Pharaoh or given in exchange for gold or silver, and these numbers are also not large. The prince of Jerusalem, for example, sends 10 slaves, 21 girls and 80 prisoners (all of whom would presumably have been assigned tasks over which they had no control when they arrived).[33] By contrast, when we read of 2,093 chariot-warriors assigned to the temple of Amun by Rameses III (the implication is that they are the king's captives from his battles), we are clearly dealing with men, probably mostly young men, from among the local elites now experiencing a great change of fortune.[34] The same social stratum is depicted in the tomb of Rekhmira, the vizier to Tuthmosis III:

> Leading in the children of the princes of the southern lands, together with the children of the princes of the northern lands, carried off as the pick of the booty … to fill the labour camps and to be the serfs of the temple estate of his father Amun.[35]

This treatment by the Egyptians of the defeated sounds somewhat less harsh than that meted out later during warfare amongst the slave-owning city-states of Greece and the Aegean in the fifth century BC, when the men of military age were put to death and the women passed into slavery.[36]

Once within Egypt they were turned into useful Egyptianized

subjects. 'They hear the speech of mankind while following the king. He made their speech disappear, changing their tongues; and they travelled upon the road which [they] had not taken [before]'; captives from Nubia were 'turned into shield-bearers, charioteers, retainers and fanbearers attending the king'.[37] In a popular Ramesside school practice text, an imaginary foreign expedition of 5,000 soldiers consists of 1,900 'men' (i.e. Egyptians), 520 Sherden, 1,600 Kehek, [100] Mashwash and 880 Nubians (all except the 'men' being foreign groups).[38]

The Sherden allies of the Libyans, whose homeland lay across the Mediterranean (they probably gave their name to Sardinia), were particularly prized in the late New Kingdom as warriors, and they came to form separate contingents in the Egyptian army, keeping their distinctive headdress (Figure 1.5). They are worth singling out for we know something of their longer-term fate. A land register from the fourth year of the reign of Rameses V (*c*. 1142 BC) which covers a part of Middle Egypt lists Sherden amongst various categories of people who were cultivating farmland (probably under a lease) (Figure 6.4, p. 254). Also mentioned are a 'Village of the Soldiers' and a 'Village of the Army'. Together they suggest a policy of rewarding veteran soldiers with grants of land. We catch a glimpse of Sherden as normal members of local society in this same part of Egypt acting as witnesses to a legal document concerning family inheritance around the same time. The various processes of dispersal probably meant that no part of Egypt would have remained untouched by foreign settlement and that, for the long-settled local populations, encounters with foreigners would have been part of normal life.[39]

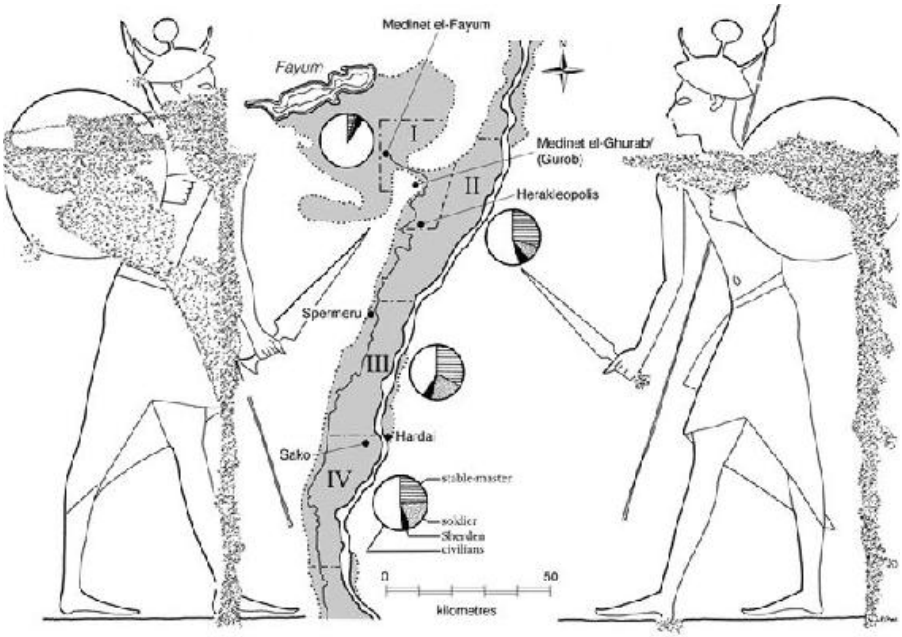

*Figure 1.5*Military settlement in a portion of the Nile valley in Middle Egypt in the Twentieth Dynasty. The agricultural land is divided into four sections or zones, and against each one a pie-chart shows the relative proportions of four different categories of person renting land from institutions. The three shaded portions of each chart represent people connected with the military: stable-masters, soldiers and Sherden; the unshaded portion represents several groups who can broadly be regarded as civilians. The source of the information is not a full census but a large register of land rents (Papyrus Wilbour) which probably excludes much land in private ownership. To this extent the figures might be misleading. The four charts combined represent 1,571 individuals. After O'Connor, 'Geography of settlement', 691, Fig. 3 and p. 694, Table 5. The flanking figures are Sherden warriors, wearing their distinctive helmets and forming a bodyguard for Rameses II. After Sandars, *Sea Peoples*, 109, Fig. 66. See also Figure 6.4, p. 254.

The ideal of peace achieved through the king's victories was, by the time of the Ramesside kings, an ancient one. By this time, however, it was also officially recognized that select groups of loyal foreigners were essential to the process. A hymn of thanksgiving for Merenptah's having released Egypt from the fear of a Libyan invasion singles them out:

> Fortresses are left to themselves,
> Wells are open for the messengers' use.
> Bastioned ramparts are in peace,
> Only sunlight wakens the watchmen;
> Medjai are stretched out asleep,

Nau and Tekten are in the fields they love.[40]

Rameses III claims credit of the same kind:

> I caused the infantry and the chariotry to rest in my time;
> the Sherden and the Kehek were in their towns, laid out on their backs.
> They had no fear, no enemy from Kush or foe from Syria.
> Their bows and their weapons remained in their stores …
> I sustained the entire land, the foreigners, the common folk, the citizens, the general populace, men and women.[41]

The named groups in both of these passages are foreign soldiers, wholly at home in the landscape of a peaceful Egypt. With these admissions we can perhaps see the overt beginnings of the process by which the Egyptian identity was deconstructed, and Egypt eventually became a part of the transregional cultural systems that are so marked a feature of the Middle East as well as of Europe in the Achaemenid, classical and mediaeval periods.

Becoming Egyptian

The bureaucractic side to ancient Egyptian society offered scope for maintaining official knowledge of every person's personal history. Thus a model letter:

> I have investigated [the matter of] the Syrian of the House of Thoth about whom you wrote to me. I have found that he was put as a field-labourer of the House of Thoth under your authority in year 3, second month of summer, day 10, from among the slaves of the ship's cargo brought back by the commander of the fortress. Note that his Syrian name is Nakady, son of Seleretjy, his mother being Kedy of the land of Arwad, a slave of the ship's cargo of this Temple in the ship of the captain Kel.[42]

But for how long would such records be maintained? We are still poorly informed about routes out of slavery and servitude but they clearly existed. Military service seems to have brought freedom to the Sherden. In a civilian example from the New Kingdom a slave has become so integral a part of the owner's family as not only to be given freedom but also a leading place in the family through marriage. The

person making the declaration is a childless widow:

> We purchased the female slave Diniheteri [a foreign name] and she gave birth to these three children, one male and two female, three in all. And I took them and nourished them and brought them up, and I have reached this day with them without them behaving badly towards me, but they dealt well with me, I having no son or daughter except them. And the stable-master Padiu entered my house and took Taamenne their elder sister to wife, he being related to me as my younger brother. And I accepted him for her and he is with her at this day. Now behold, I have made her a freewoman of the land of Pharaoh, and if she bear either son or daughter, they shall be freemen of the land of Pharaoh in exactly the same way.[43]

When the slave-owner was a temple a cosy relationship of this kind is less likely. Slave-labour camps, however, must have created their own demographic pressure. They appear not to have been single-sex prisons but accommodated normal family structures. When first brought in, the captives will often have been at their reproductive peak and likely, therefore, to have reproduced at above their rate of replacement. We are more or less bound to accept that 'leakage' out of these camps happened all the time. Eventually, perhaps several generations onwards and as the circumstances of society changed, whole groups would have transferred into the general population. Moreover, from the point of view of the composition of the population of ancient Egypt, the degree of freedom which people had is of small importance. Although some doubtless fled back to their homeland, many immigrants must have remained resident for long enough to form part of the reproducing population. The consequences for the population of a major city are hinted at by the signs of heterogeneous ethnic mix from skeletons excavated at Amarna (p. 52 and Chapter 8, pp. 374–5).

Many lines of evidence leave the impression that the barriers which the Egyptians thought kept them separate from foreigners were, in practice, very permeable. We have no evidence that the Egyptians developed a concept of citizenship. If you were a slave you were registered and your life was controlled, but that was true for Egyptians and foreigners alike. Otherwise, birthplace and lineage seem to have had no clear standing in law. What was probably generally needed to stay on and avoid expulsion was to occupy a recognized niche – that

of a foreign soldier was one – or to have the protection of an Egyptian patron, or in the end just the hope which immigrants have that they will not be noticed. From then on, an informal process of 'naturalization' and absorption into the Egyptian population was open. To be an Egyptian one simply acted the part. It was all a matter of style, of cultural statement.

Most important, it seems, was speaking Egyptian and, for a man of ambition, reading and writing it, too. Language must have come close to being the qualifying test for Egyptianness. It was a subject that required self-conscious study. As time passed, the spoken language changed, in grammar and in vocabulary. But by the New Kingdom the form of the written language of the Middle Kingdom (which in its time had presumably reflected the vernacular) was being carefully preserved through scribal schools. It gave access to old literature that was regarded as instructive and improving, and allowed an archaic feel to be maintained in texts which required an extra stamp of authority, usually those carved on temple walls. To join the elite, therefore, required a degree of dedicated language study. A close second to language was dress. From numberless artistic representations, from clear written statements, and from the many finds of textiles, the Egyptians reveal a deep attachment to white linen dress. Recall Sinuhe. Foreigners are, in part, distinguished by dressing differently, usually in the use of colour and probably by a greater use of wool.

Some immigrants went on to become members of the Egyptian scribal elite. These people are perhaps more likely to have come to Egypt as captives or hostages drawn from the aristocratic families of conquered places and allowed to retain their status at the Egyptian court. This was politically useful to the Egyptians, for as one text explains, 'if any one of these rulers (i.e. of a conquered city) died, His Majesty would send his son to stand in his place', the son having been an enforced resident at the Egyptian court.[44] In the New Kingdom such men often took an Egyptian 'loyalist' name built around the name of the king or the word for 'ruler', *heka*. An example is Ben-Ia (a Semitic name) called Pahekamen ('the ruler endures'), page and architect at the court of Tuthmosis III.[45] He shows his parents as a purely Egyptian couple (Figure 1.6). Does this mean that he was the son of immigrants or could this be a statement of cultured politeness on his part? Another example is Ben-Isina called Ramessu-emperre ('Rameses in the house of Ra'), who was fanbearer to Rameses II.[46] A class of courtiers of the Ramesside Period bore a title which, for

convenience, we translate as ‘royal butler’. A study of 65 of them reveals that 14 (22 per cent) were definitely foreign and another 16 (25 per cent) bore ‘loyalist’ names and so may have been foreign.[47] This is part of the background to the development of an ‘international’ court culture in Egypt about which more will be said later (Chapter 6, pp. 282–6).

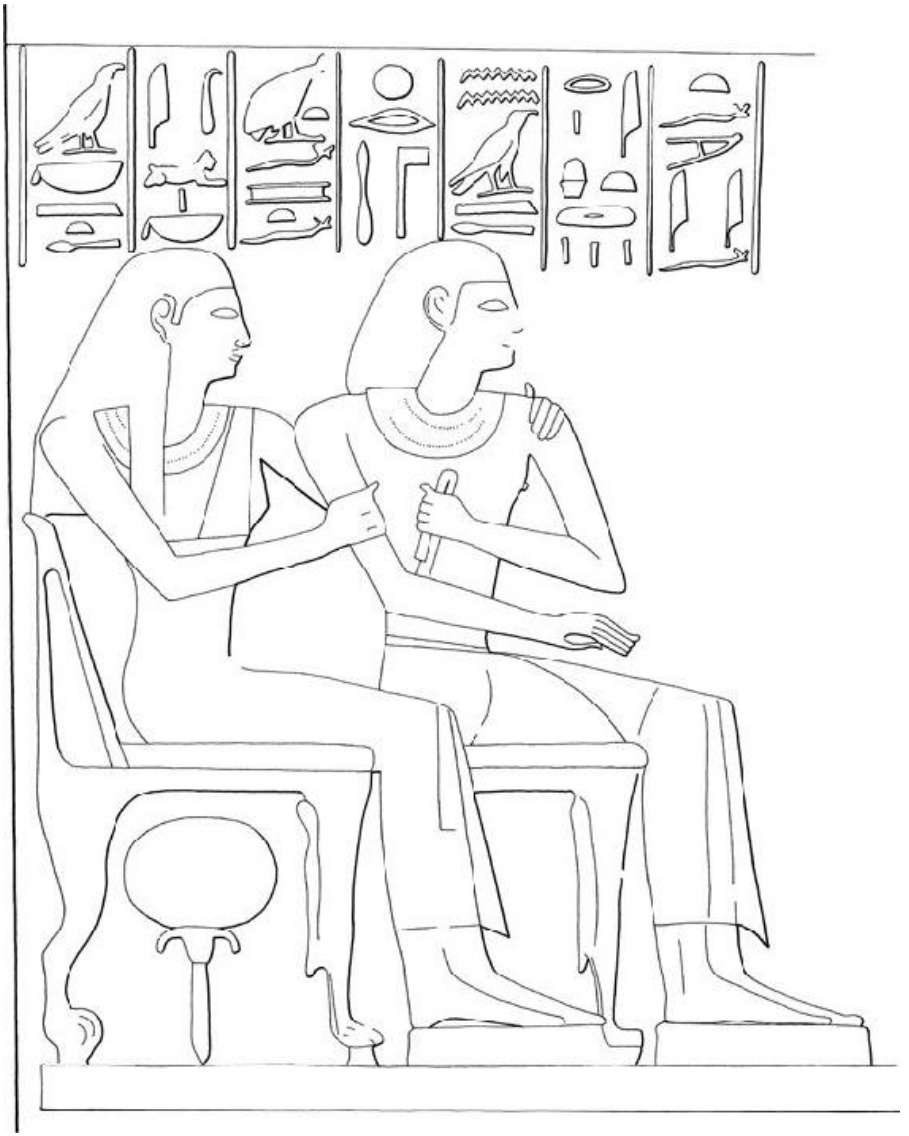

*Figure 1.6*Just another ancient Egyptian couple? In his tomb at Thebes (no. 343) the Asiatic page at the court of Tuthmosis III, Ben-Ia called Pahekamen, honours his parents, shown here. The text above the couple reads: ‘his beloved father Irtenna, justified before the great god; his beloved mother Tirkak, justified’. Their names are foreign, presumably Semitic, and the father has no title. Did they really move to

Egypt following their son and become Egyptians, or did they remain behind in Syria or Palestine and their Egyptian appearance here is in deference to the son's aspirations? After *LAAA* 14 (1927), Pls 20, 23; also Guksch, *Grab des Benja*, Taf. 13.

A vivid example of the progress of transition, almost of pilgrimage, to the court circle of Egypt concerns members of aristocratic families from northern Nubia in the New Kingdom (Figure 1.7), an area firmly under Egyptian control by this time. In the tomb at Thebes of the Egyptian viceroy of Kush named Huy, of the time of Tutankhamun (*c.* 1343–1333 BC), a group of them are painted with great skill. They are dark-skinned but dressed in the loose white robes of the Egyptian official class. The scene informs us by hieroglyphic label as to who they are. In front of (2) are the words 'Princes of Lower Nubia (Wawat)', whilst between (4) and (5) is the label 'Children of the princes of all the foreign lands'. The discretely placed label in front of the chest of (2) adds an unusual element of familiarity in naming the individual: 'Prince of Miam, Hekanefer'. We know from archaeological survey and excavation that Miam was simultaneously the name for an Egyptian colonial town in the vicinity of the modern village of Aniba, and a more extensive strip of the Nubian Nile valley. The actual tomb of Hekanefer is known, cut into an isolated hill of rock 25 km upstream from the Egyptian town that had, in practice, taken over control of the prince's territory.[48] Hekanefer is not likely to have been the name given to him at birth. This is not recorded. Hekanefer is a loyalist name which is likely to have been chosen by him or perhaps bestowed as an honour upon him through contact with the Egyptian court. It means 'The good ruler', in reference to the Pharaoh. The fact that he is named in the viceroy's tomb suggests that he had accommodated himself well to his Egyptian masters, that he had made himself very useful or had established himself as the viceroy's personal friend. His fellow princes are not named (and the fact that the whole group numbers three need only be an indication of plurality), but we can make an informed guess as to who one of them was, at least. A little further upstream lay the Nubian territory called Teh-khet (in the vicinity of the modern village of Debeira) wherein were situated tombs of New Kingdom 'princes' of this territory. One of them is a likely candidate for one of Hekanefer's companions.

*Figure 1.7*The Nubian elite as seen by their Egyptian counterparts. A scene from the tomb of Huy (no. 40 at Thebes). After N. de G. Davies and A.H. Gardiner, *The Tomb of Ḥuy, Viceroy of Nubia in the Reign of Tutʿankhamūn (No. 40)*, London, EES, 1926, 23–4, Pls XXIII, XXVII, XXVIII. For the meaning of the numbers see the main text.

The whole group in the painting is a careful study of cultural integration (perhaps 'entanglement' is a more appropriate term). Egyptian artists of the time exercised a degree of stylistic choice, between naturalism and stylization. In every aspect the artist has decided what effect he wants to convey. In the case of foreigners stylization normally meant ethnic stereotyping. Huy's artist, however, has followed a middle path. The skin colours are dark, alternately black and brown, a standard technique to help the viewer more easily distinguish individual figures. The facial profiles, however, lack the 'Negroid' features that artists commonly used for southerners and which Huy's artist himself used for other Nubians in the same scene (but not included in Figure 1.7). This group is special. With all his Nubians the artist has painted their hair with a yellow or reddish background colour and then added thick black strokes to give it texture. This is in contrast to his Egyptians whose hair, as is normal, is rendered as an undifferentiated black area. Is this a sign of a Nubian custom of working clay into the hair? Whatever the reason, it has aided the artist in showing the hair of individuals (4)–(8) arranged in the manner of a fashionably dressed Egyptian. Indeed, these figures could be wearing Egyptian-style wigs. Most striking of all is that persons (4)–(8) are dressed wholly in white linen, in the billowing

drapes which had become the height of fashion in the late Eighteenth Dynasty. Individual (4), in dress and slim build, could pass as an Egyptian princess, except that on her and on the children the artist has added pairs of animal tails suspended from their elbows and, on the woman herself, a superabundance of armlets. These are people who are aspiring to be Egyptian courtiers but who have retained (or been given by the artist) a few features of their own culture. The standing woman (4) holds the attention, in part by an added degree of separation from the other figures. Is she Hekanefer's wife, or a daughter now resident at court? The four who stand behind her seem to be juveniles. Two of them, (5) and (7), have plaited sidelocks in their hair which in Egypt was a symbol of childhood. They are dressed as males but shown with body fat on the chest. What is their home ground? Are they now being brought up at court and preparing to adopt Egyptian names?

Huy's tomb scene is not the last word on Hekanefer and his family. The latter's tomb at Toshka was modelled on that of the viceroy Huy at Thebes (Figure 1.8), was decorated with Egyptian-style paintings and accommodated burials which had also followed Egyptian practice. To Egyptians he remained a Nubian, but to his local community he presented himself as if he were an Egyptian. If his children had joined the court in Egypt, and had been fed, clothed and kept in some degree of luxury at the state's expense, they might have chosen to make their tomb in one of the court cemeteries, perhaps at Thebes or Memphis (Saqqara). Here, in their monument for posterity, they might well have chosen to appear wholly Egyptian and we probably would not be able to recognize their foreign birth as Nubians.

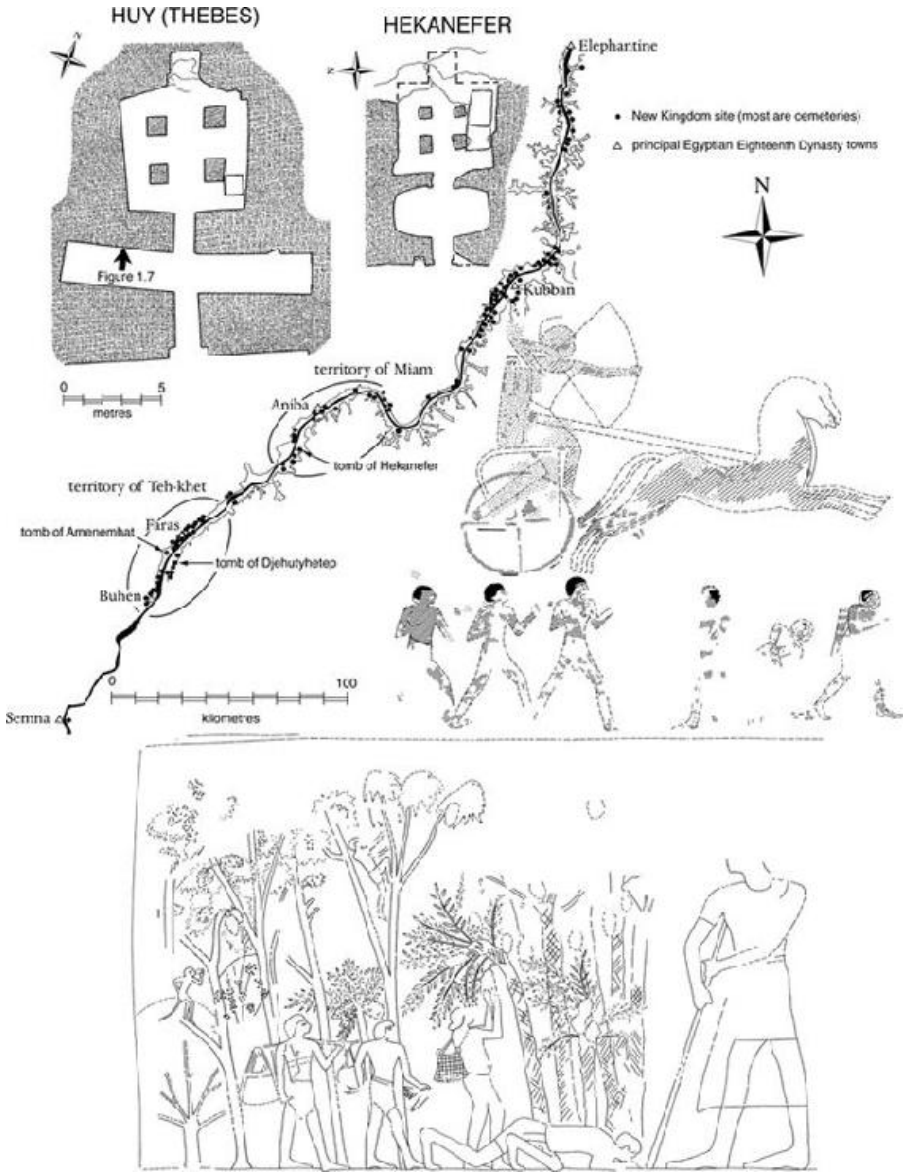

*Figure 1.8*The Nubian elite as seen by themselves. The map shows the distribution of population in Lower Nubia during the New Kingdom (and mainly the Eighteenth Dynasty) according to the results of archaeological survey. The approximate boundaries of two native princedoms, Miam and Teh-khet, are marked. One of the princes of Miam, Hekanefer, was the very same one identified by name in the tomb at Thebes of the Egyptian viceroy Huy (Figure 1.7). The plan of Huy's tomb is shown in the top-left corner, the arrow marking the position of Hekanefer in the wall paintings. Hekanefer's own rock tomb within Miam is shown alongside at the same scale. It was clearly designed to have the same plan. The tombs of two of the princes of Teh-khet, Amenemhat and Djehutyhetep, lay on opposite banks of the Nile. Two of the paintings from Djehutyhetep's tomb are shown. In the upper scene the prince hunts in his chariot, a skill he is likely to have learned at the Egyptian court. In the lower scene he inspects men who work in a plantation. Not only is he himself shown

as if an Egyptian, so too are all of the men except for the one picking dates, who looks as if intended to be a Nubian. Map after B.G. Trigger, *History and Settlement in Lower Nubia*, New Haven, CT, Department of Anthropology, YUP, 1965, 100, Fig. 3. Plan of Hekanefer's tomb after Simpson, *Heka-nefer*, 7, Fig. 4. Scenes from Djehutyhetep's tomb after T. Säve-Söderbergh, *Kush* 8 (1960), 32, Fig. 5; 39, Fig. 10.

The archaeology of immigration

Where archaeologists study prehistoric societies (for example, those of pre-Roman Europe) they confront a problem of explanation when the material culture of one region undergoes a widespread change linked to the culture of another region. Does the change represent a migration, perhaps even an invasion, or the fruits of more intensive trading? Preferring one explanation to another – trade or invasion – is often a matter of academic taste and fashion. For much of the time for ancient Egypt the situation is reversed. We know of foreign immigration and settlement not from archaeology but from Egyptian texts and artistic representations. This is noteworthy in itself, for it suggests that immigrants very quickly abandoned the use of those things which tend to survive as part of the archaeological record: distinctive pottery, or jewellery, or burial customs. No one has yet recognized, for example, a cemetery of the Sherden people in Middle Egypt. Yet we know that they were living there from written sources. And if these people retained their own languages for use amongst themselves, they did not seek to write them down.

Within the period covered by this book there is one notable exception. It concerns a protracted span of time that seems to have begun in the latter part of the Middle Kingdom and was brought to an end atthe beginning of the New Kingdom (thus between *c*. 1780 and 1540 BC, the beginnings being particularly hard to pin down). Two quite separate groups of people were involved, and this alone suggests the workings of factors that were not exclusive to one region.

In 1898–99 the archaeologist Flinders Petrie and his assistants, working along a series of desert-edge cemeteries in the vicinity of Dendera in Upper Egypt, encountered a category of 'shallow pan-shaped graves' in which the dead had been buried with objects which were a mix of pieces from a culture which bore resemblances to that of the prehistoric Egyptians, and of Egyptian objects which seemed to post-date the Twelfth Dynasty. In the ensuing years other sites of the same 'pan-grave' culture, a few of them desert-edge settlements, came to light, spread along the edge of the Nile valley in Upper Egypt as far north as the vicinity of Asyut (Figure 1.9). For a time a neat

explanation applied. This was that pan-grave culture belonged to groups of warriors from the mountainous eastern desert, the Medjay (of the land of Medja), who were mentioned in a key text as having been employed by the Theban King Kamose (*c*. 1553–1549 BC) in his battle against the occupying Hyksos dynasty in the north of Egypt. Further investigation has shown, however, that the features that make up pan-grave culture occur far more extensively. They are to be found along the banks of the Nile through Lower Nubia, and their distinctive hand-made pottery occurs in the rubbish layers of Egyptian towns at least as far north as Memphis. It also seems to appear during the Thirteenth Dynasty, thus some time before the civil war that ended Hyksos rule (in favour of Thebes and a reunited Egypt) and the Second Intermediate Period.[49]

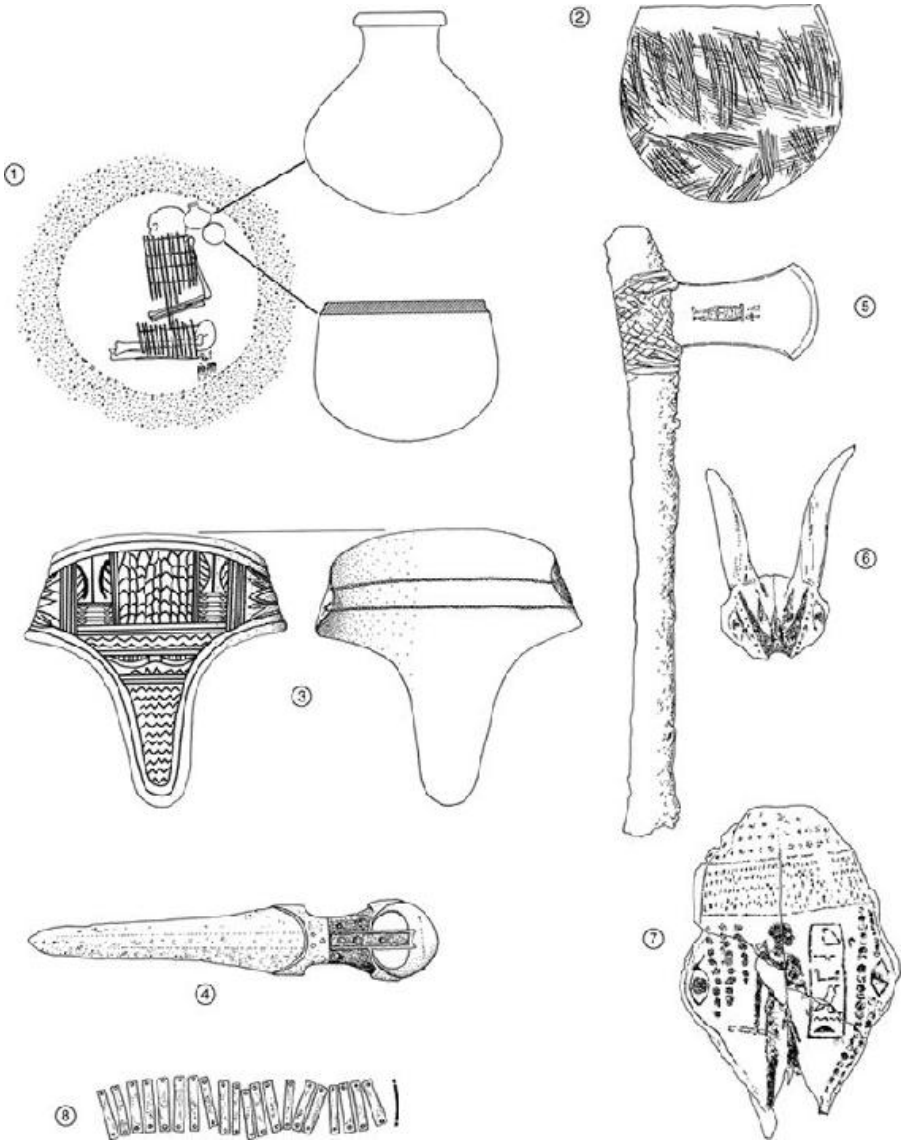

*Figure 1.9*Immigrant culture: eastern desert settlers of the so-called pan-grave culture. (1) Grave, 1.65 m deep, for a single tightly contracted burial. It contained numerous small beads in addition to the two pots. The storage jar is of Egyptian style, the bowl (hand-made, with black top) is of a type favoured by these people. (2) A second example of a hand-made bowl, with a characteristic pattern of incised lines. (3) Decorated leather object worn by archers on the inside of their wrist and palm to protect them from the bow-string. (4) Composite dagger, the blade and handle-frame of copper alloy/bronze inlaid with wood and topped with an ivory pommel, the copper rivets fitted with silver washers. (5) An axe with a bronze blade lashed with leather thongs to its wooden handle, the blade incised with the name of a King Nebmaatra of the Second Intermediate Period. (6) Skull plate and horns of a goat, painted red and black with a pattern of eyes and lotus (water lily) leaves. (7) Skull plate of an ox painted red and black with a pattern of eyes, dots, and a warrior with an axe, a club and a shield which bears what is perhaps his name, Qeskanet, in

hieroglyphs. (8) A favoured form of body decoration: small pierced strips of mother-of-pearl intended to be strung together. (1) and (3) are from Balabish. After G.A. Wainwright, *Balabish*, London, EES, 1920, Pls XII, XIV, XV. (2) and (4)–(7) are from El-Mostageda. After Brunton, *Mostagedda*, Pls LXXIV–LXXVII; W.V. Davies, *Catalogue of Egyptian Antiquities in the British Museum* VII, *Tools and Weapons* I, *Axes*, London, BM, 1987, Pl. 18, no. 102. (8) is from Sayala in Nubia. After M. Bietak, *Ausgrabungen in Sayala-Nubien 1961–1965. Denkmäler der C-Gruppen und der Pan-Gräber-Kultur*, Vienna, VOAW, 1966, Taf. 32.

When pan-grave sites occur on their own they give the impression of having belonged to small groups of people, perhaps a single extended family. The inclusion in and around their tombs of the horns of goats, sheep, gazelle and oxen suggests that herding was part of their original way of life. They might indeed be the Medjay population from which Kamose drew special troops of warriors (though some dispute this); but it was a population that had descended to settle in the Nile valley well before his time. The numbers in individual groups might have been small, but their geographical spread suggests that a significant episode of immigration had occurred, probably originating in the huge zone of the Sudanese Red Sea hills. Nor might it have been a quiet trickling in. A text at El-Kab, to the south of Thebes, records an attempted invasion at this time by a coalition of southern peoples amongst whom the Medjay are mentioned.[50] The people of pan-grave sites could have been the terror of their Egyptian neighbours. By the end of the Second Intermediate Period some of the cemeteries show increasing Egyptianization in grave goods and burial customs, pointing to the absorption of these small communities into the local population. In the early New Kingdom the archaeological signs by which we identify them vanish altogether.

In the north of Egypt the same period saw immigration and settlement from Palestine, perhaps by the descendants of the people who had befriended Sinuhe. Elements of their culture, including pottery, metalwork and the distinctive practice of burying equids (donkeys) and sometimes sheep beside their graves, have been found in sites along the eastern side of the Nile delta and along the Wadi Tumilat, which extends a fertile finger eastwards towards the Gulf of Suez (Figure 1.10). Their presence is most conspicuously documented at Tell el-Dabʾa, a huge town site in the north-east delta. Called Avaris in ancient times, it became the fortified centre for the line of Palestinian kings, the Hyksos, who at this time ruled northern Egypt for just over a century and, for a short time, may even have ruled the whole country.[51]

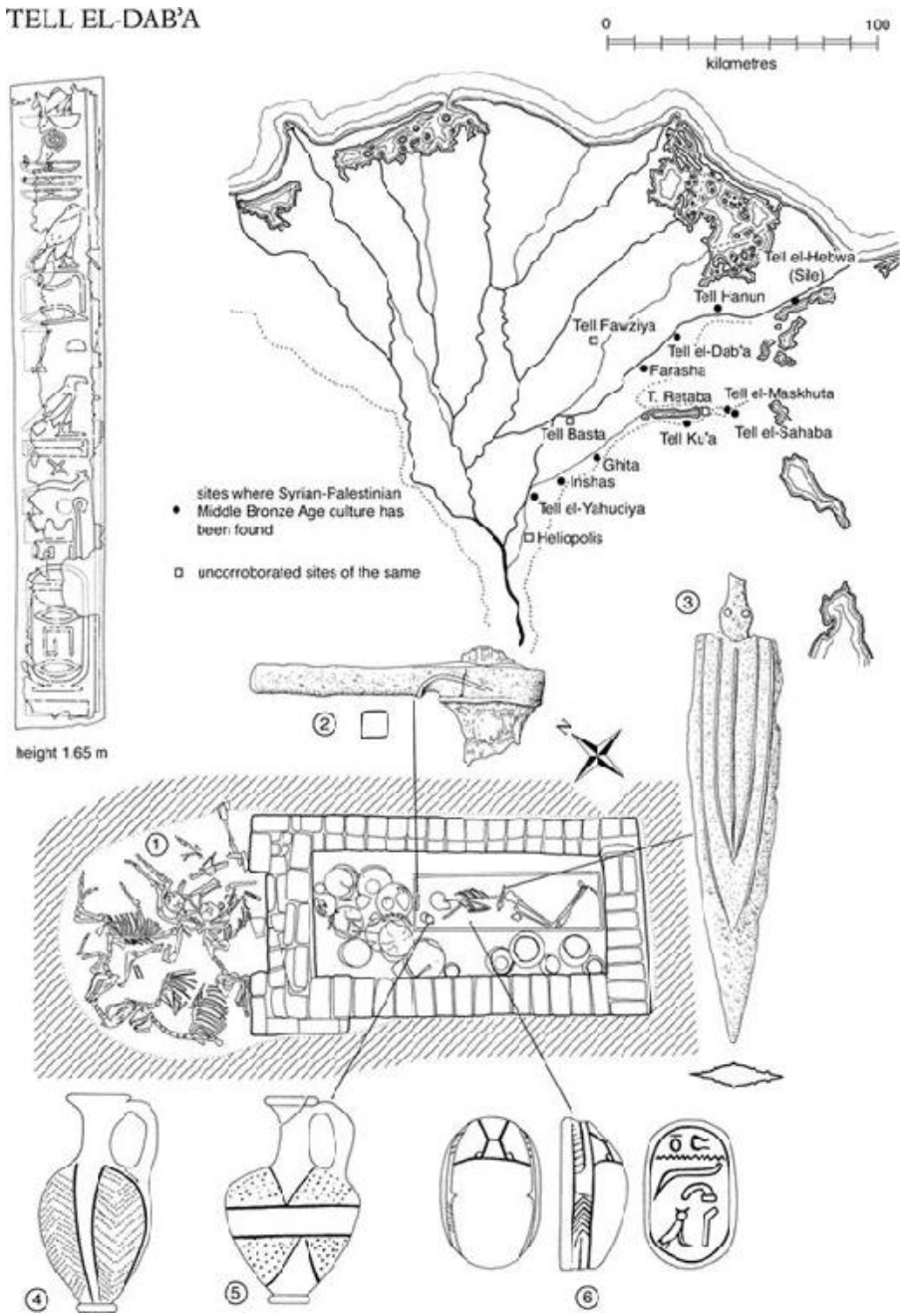

*Figure 1.10*Immigrant culture: Palestinian settlers of the Middle Bronze Age in the eastern delta. The grave is from their main site at Tell el-Dabʾa. (1) A supplementary pit containing the carcasses of sacrificed donkeys. (2) A narrow-bladed bronze battle-axe. (3) The blade of a bronze dagger. (4) and (5) Black polished Tell el-Yahudiya-style juglets in vogue at this time. (6) Scarab-shaped seal bearing the name of the 'Deputy treasurer, Aamu (Asiatic)'. The door jamb, from the same site,

bears the name of one their Egyptianized kings, 'the foreign prince, Seker-her (or Sikri-Haddu)'. After Bietak, *Avaris*, 39, Fig. 34 (map); 66, Fig. 52 (door jamb); M. Bietak, Christa Mlinar, and Angela Schwab, *Tell el-Dabʾa* V: *ein Friedhofsbezirk der Mittleren Bronzezeitkultur mit Totentempel und Siedlungsschichten*, Teil I, Vienna, VOAW, 1991, 51–60, grave A/II-l/12-Nr. 5, objects 4 (pot), 809 (scarab), 810 (dagger), 811 (axe); also 183, Abb. 140, object 8 (pot) from a different grave.

The Egyptian texts that refer to this time express outrage directed against the 'Asiatic' character of the intruders in the north. It is not just their rulers. The Theban war against the Hyksos in the reign of the Theban King Kamose began with an attack on the town of Nefrusi (near Asyut), which is styled 'a nest of Asiatics'. What psychology is at work here? Does it represent a broadly based ethnic hatred or the language of dynastic advancement against an internal political challenge? In the initial war council, Kamose alone is of this view. His courtiers express acceptance of the situation. But is this just a literary cliché intended to highlight Kamose's qualities of incisive leadership? Since we lack sources that cover the consequences of the Theban pacification of the north we are in a poor position to make a balanced judgement. From modern experience we can recognize the basis for purification, for ethnic cleansing, but was it seen in this way and carried out? We do not know what attitude the Egyptian population of the north had towards the Palestinians amongst them, nor how they felt about being 'liberated' by an aggressive Theban family from the south. The war against the Hyksos started by King Kamose of Thebes could equally be seen as a civil war for the advantage of Thebes rather than as a war of 'national' liberation. The Theban texts express a combination of dynastic righteousness and a rejection of foreignness, but they are the only written sources we have.[52] Following the reassertion of Egyptian national culture at the hands of the kings of Thebes, who created the powerful state that we call the New Kingdom, almost overnight (as it seems from our distant perspective) the immigrant cultures of the Second Intermediate Period vanished. Their bearers, the Palestinians and eastern desert peoples, either left the country or were absorbed into the Egyptian population, in the process abandoning the distinctive elements of their material culture. With peace and confidence restored through the conquest of neighbours, Egypt itself reverted to a comfortable, inclusive, non-divisive approach to the idea of national community.

Land of promise

Many of the foreigners who ended up in Egypt were torn from their homes. But for some, the country's prosperity and opportunities were a lure. As far as we can tell, the desert people and the Palestinians who migrated to Upper Egypt and to the eastern delta respectively in the late Middle Kingdom and Second Intermediate Period, and who for a time retained their own culture, did so of their own choosing. They would have been distant forerunners of the Arabs and Bedouin who, after the Arab conquest of Egypt in AD 641 and in a process which was still active in the nineteenth century AD, set up their camps in Egypt and eventually merged with the existing population (although their Bedouin origin is in places in Egypt still not forgotten). The current insurrection in north Sinai, which the Egyptian security forces are finding hard to suppress, is a reminder of the power that peripheral and dispersed desert groups can have to disrupt the society of settled neighbours.

Migrancy is a major theme of modern history. It takes place against a worldwide background of fixed frontiers and legal rules of residence. For the benefit of the established property-owning citizens, everywhere has become a police state. People still move, and in ever-increasing numbers, through fear and in pursuit of a better life. It can take on the character of the stampeding form of herding behaviour. But since the mid-twentieth century AD countries of migrant destination have had sufficiently robust systems of government to control the place in society that migrants occupy. Following the huge European migrations to the Americas, Australasia, parts of Africa and (in the case of Israel) the Middle East there seems no longer scope for migration by whole groups who keep their own hierarchies intact and seek to re-establish them either in unoccupied territory or within the confines of someone else's. Migrants, despite their numbers, now mostly occupy an inferior position in their adopted country.

A relatively well-documented case of transfer of a complete society from one region to another concerns the Libyans during the first millennium Bc who feature so prominently as the enemy in Egyptian battle records of two to three centuries earlier. In a kind of reverse exodus, and despite earlier defeats at the hands of the Egyptians, they successfully moved as a series of complete societies into the Nile valley from homelands that must have lain along the Mediterranean coastal zone and southwards into some of the oases. Once arrived, they set themselves up in positions of authority, eventually becoming the rulers of large parts of the country. Early in this historical process the Egyptians began to identify them by more specific tribal names,

primarily the 'Libu' (from which the modern name Libya derives) and the Mashwash (or Meshwesh), who became the dominant group, as well as tribes called Isbet, Qayqasha, Shaytep, Hasa and Baqana. At first in the reign of Merenptah and then in the reign of Rameses III the Egyptians fought battles against them that were recorded as overwhelming victories.[53]

Interspersed amidst the language of triumph are short passages of description. We learn from these that they had named leaders, Mariy, son of Didi, in the time of Merenptah, and Meshesher, son of Keper, in the time of Rameses III. They travelled with their wives, children, other leaders, a large number of followers, and with herds of animals, including cattle. They had tented camps (which the Egyptians burnt). As a pastoral people, however, they had undergone a transformation, for they came armed and otherwise equipped with the trappings of the military societies of the Mediterranean Bronze Age: with swords, horses and chariots, vessels of bronze and silver. Someone, it seems, had either been supplying them with up-to-date weapons and the means to acquire real wealth, or they had equipped themselves from routed Egyptian soldiers. They were politically organized, too, for they had formed some sort of league with raiders from across the other side of the Mediterranean, people whom the Egyptians identified as Aqawasha, Turshu, Luku, Sherden, Shekelesh 'and the northerners who came from every land', and, in another source, as the 'peoples of the sea'. The background to this transformation of 'Libyan' societies is unknown, for so far the archaeological material (even from their presumed homelands) with which to supplement the Egyptian written and pictorial sources remains sparse.[54]

The triumphalism of Egyptian battle texts was in vain. Over the next two centuries a large part of Egypt fell under the control of Libyan families whose men sometimes bore non-Egyptian names such as Sheshonq, Osorkon and Nemlut, and the title 'Great Chief of the Ma', an abbreviation for the Libyan tribal name Mashwash. Some of them created local dynasties of kings. To judge from the scale of Libyan penetration it is entirely reasonable to conclude that, perhaps on more than one occasion and spread over a period of time, Egyptian armies were actually defeated and Libyan groups entered as victors and took over the government of many major cities by force (even though written sources do not document this). Although they kept something of their non-Egyptian identity (perhaps they continued to speak their own language amongst themselves), they ruled within the existing system and seem to have been particularly attracted to some

of the most prestigious of the cults and priesthoods of Egypt. Two examples will suffice to illustrate this. One is a memorial stone set up in the Serapeum at Saqqara, which records the generosity of the donor in arranging for the burial of a sacred Apis bull at a time close to the end of the Libyan political ascendancy of the Twenty-second Dynasty (948–715 BC) (Figure 1.11).[55] The donor, Pasenhor, was both commander of an army and high priest of the cult of the god Heryshef at the provincial city of Herakleopolis in Middle Egypt. He added his genealogy, ascending back through 15 generations. Some of his male ancestors were previous Libyan kings of Egypt, but most had been, like him, in charge of the temple of Heryshef. The earliest are also termed 'great chief', and the very first in the list is simply called 'the Libyan, Buyuwawa', presumably the patriarchal leader of a tribe before the descent into Egypt. It illustrates how, despite behaving in accordance with the customs of the adopted country, people can maintain over many generations a memory of who they really are. Pasenhor's stela must stand for innumerable people from the lands surrounding Egypt who made Egypt their home.

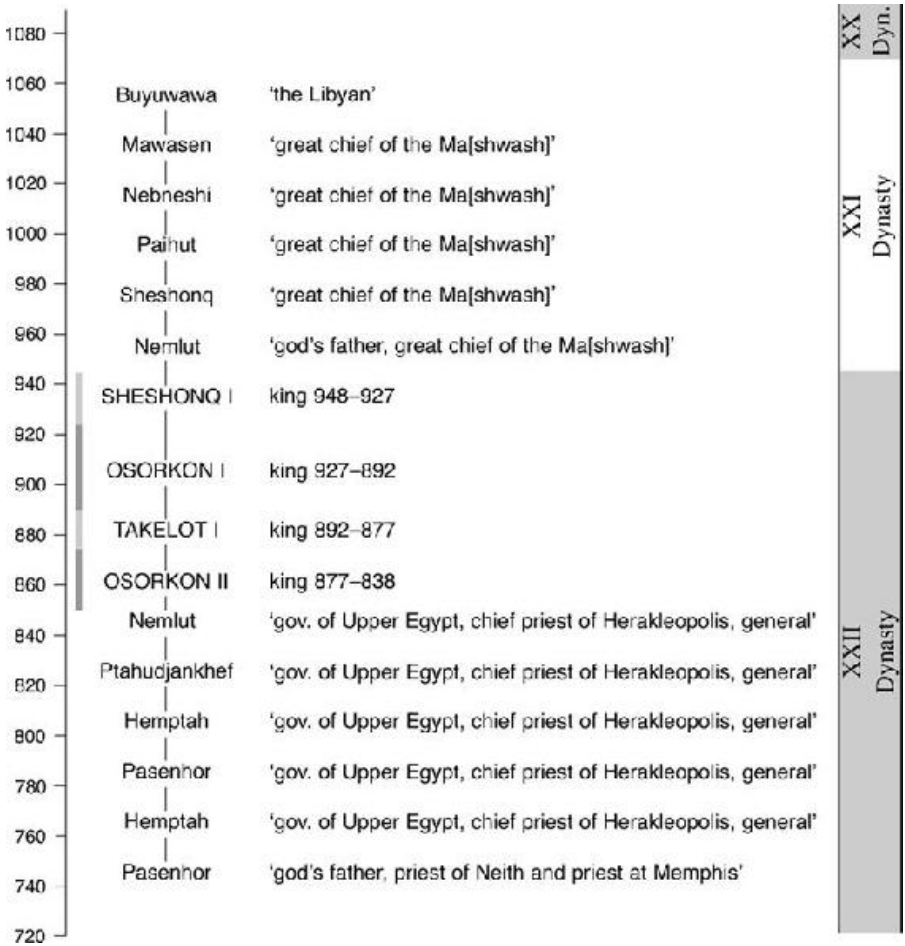

Figure 1.11 The genealogy of the priest Pasenhor who lived in the reign of Sheshonq V of the Twenty-second Dynasty. On a commemorative stela he lists 15 generations of ancestors who included four kings and, before them, Libyan chiefs probably settled in Egypt (Nebneshi and Paihut are Egyptian names). The first ancestor he recognizes, Buyuwawa, was perhaps the leader who brought the tribe (the Mashwash) into Egypt. If all the generations represent roughly the same length of time, Buyuwawa would have lived shortly after the end of the New Kingdom. The last of the ancestors to have a Libyan name was Nemlut. After Kitchen, *Third Intermediate*, 105–6, 488, Table 19.

The second example also concerns a high priest, of Amun at Karnak (Thebes). It has long been known that, at the end of the New Kingdom, southern Egypt came under the effective rule of the high priests (see also pp. 288–9). This should not be seen as a triumph of a priestly class, however, since these men also possessed their own armies. One of the first, Herihor, bore an Egyptian name, as did his wife, Nedjmet. As part of the decoration which he added to one of the Theban temples, dedicated to the god Khonsu, were pictures of his

sons and daughters. Five of the 19 sons have Libyan names: Masaharta, Masqaharta, Nawasun, Osorkon and probably also Madenen. It seems likely that Herihor was either another of these successful Libyan soldier-settlers, or descended from one. The high priesthood of Amun remained under their control for three centuries, until the establishment of the Sudanese Twenty-fifth Dynasty (during the reign of King Piankhy or Piy, 752–721 BC).[56]

As is so often the case with pre-modern history, it has been necessary so far to rely upon evidence that is hard to quantify and is often anecdotal. The tomb of 'Ben-Ia called Pahekamen' might be a nice illustration of a process of naturalization but how typical was it? At different periods what was the rate of immigration and absorption? The only possibility of quantification of population change lies in the study of actual human remains from ancient cemeteries, and the attempt to identify the ethnic origin of individuals or groups. This, however, leads to an altogether more controversial subject. For one thing, we need to have a baseline of comparison, and thus an agreed view of what the early indigenous population of Egypt looked like, to whom they were most closely related, and even, perhaps, from where they came.

The peopling of Egypt

'White (Caucasian) male, in his late seventies, height 5 ft 9 inches (1.75 m), weight 150 pounds (68 kilos) …' So a police file might describe me. The broadly phrased racial categorization is normal and is an aid to recognition, at least in my own country and the USA. It extends back into the skeleton where it becomes a means of helping to establish the identity of decayed human remains in police cases. As long as one keeps to very broad categories, groups of certain skeletal traits turn out to offer a reliable guide to placing the bones of an individual within one category or another. Since these methods and categories become evidence to be tested in law courts they can be said to possess a reasonable degree of objectivity. The racial categories which have for a long time been defined in forensic manuals are three: Mongoloids, Blacks or Negroids, and Whites or Caucasoids. Although these terms now have a jarring, anachronistic sound, an evaluation of the terminology (written in 2009) still had the following to say: 'Although a shift in terminology has been underway in forensic anthropology, with "ancestry" used more often in place of "race", in

many case reports the classical anthropology terms such as "Caucasoid", "Mongoloid", or "Negroid" are still seen.'[57] An example of the criteria is the shape of the nasal aperture: very broad and lacking a sharp lower border in the Negroid group, and very narrow and with a prominent sharp lower border in the Caucasoid group. Its exact breadth, when combined with other measurements in a carefully constructed scoring system and definitions of scope, provides an arithmetical basis for identifying race (or ancestry) based on modern reference populations of the USA. At this level of skeletal study, defined in this broadest of fashions, I share my 'whiteness' with peoples of North Africa and India. Groupings as broad as this do not, of course, correspond with most people's conceptions of 'race', which recognize more finely divided stereotypes. The 'whiteness' which I share with people from the Maghreb and the Punjab is obviously far from 'street' experience.

Despite this, however, at first sight it looks as though 'race' can be objectively defined. One forensic anthropologist (Norman Sauer) has asked: 'If races don't exist, why are forensic anthropologists so good at identifying them?' He provides an answer: 'to identify a person as having ancestors from, say, Northern Europe does not identify a biological race of Northern Europeans'.[58] He could have said the same for Africa. Comparative studies of craniometrics (skull measurements) and DNA markers demonstrate that, as a broad generality, people living farther apart in the world tend to look more different, but those differences tend not to form discrete 'islands' but to blend into one another. This is not surprising, given that *Homo sapiens* is a single species that probably arose from a set of subdivided ancestor populations located across Africa (and not just East Africa) that spread out and colonized the world, developing or emphasizing local differences in characteristics as it did so. These, along with population movements, have created a complex, uneven pattern of local variation, leading to degrees of variation or heterogeneity within more or less any population that one cares to sample. 'There are so many possible distinctive biological races that the concept is virtually meaningless. We can only concur with Howells' (1995, p. 103) modification of Livingstone's 1962 quote: "There are no races, only populations".'[59]

The reason for these remarks is that conventionally the boundary between Caucasoids and Negroids runs not along the centre line of the Mediterranean but through North Africa, passing across the Nile valley well to the south of Egypt, in the northern Sudan. The

‘consensus view is that the Sahara Desert has been a more significant barrier to human groups than the Mediterranean Sea’.[60] Egyptians are thus classed as Caucasoids, along with the peoples of the Middle East, India and Europe. What is a broad classification of convenience becomes politically contentious when the ancient Egyptians are also put into this group, and by implication a truly ‘African’ origin for ancient Egyptian civilization – to which Africans of all parts of the continent, as well as Afro-Caribbeans, can look with pride as part of their heritage – seems to be questioned. Although the modern practice of racial identification is intended to be neutral and descriptive, it easily slides, in the case of ancient Egypt, into a concept of ancestral homelands. Might not the evidence show that the Egyptians, as Caucasoids, ultimately came from the eastern Mediterranean and Middle East? Discussions took this course even into the 1950s AD, most notably on the theme that the development of Egyptian civilization was given a vigorous push by the immigration around the beginning of the First Dynasty of a forceful and intelligent people from the east, the ‘dynastic race’, who came to dominate the existing population of predominantly Negroid type. Today these are troubled waters which most people who write about ancient Egypt from within the mainstream of scholarship avoid.[61]

One of the aims of modern studies by physical anthropologists is to determine how similar the individuals of a given historic population were. Did that population tend towards homogeneity or heterogeneity? The general reader wanting a clear picture of what a particular ancient people looked like hopes for the former, whereas the latter tends to rule (Figure 1.12). At first sight it might seem that we already know what the ancient Egyptians looked like from the innumerable pictures and statues that they made of themselves. The skeletal evidence as well as our own general experience of living in large communities warns us, however, that this must disguise a range of variation by time and locality which art did not reflect, the reason being that absolute likeness was not generally its purpose. Egyptian artists turned the same ability by which they stereotyped foreigners on to themselves as well. They created an Egyptian stereotype.

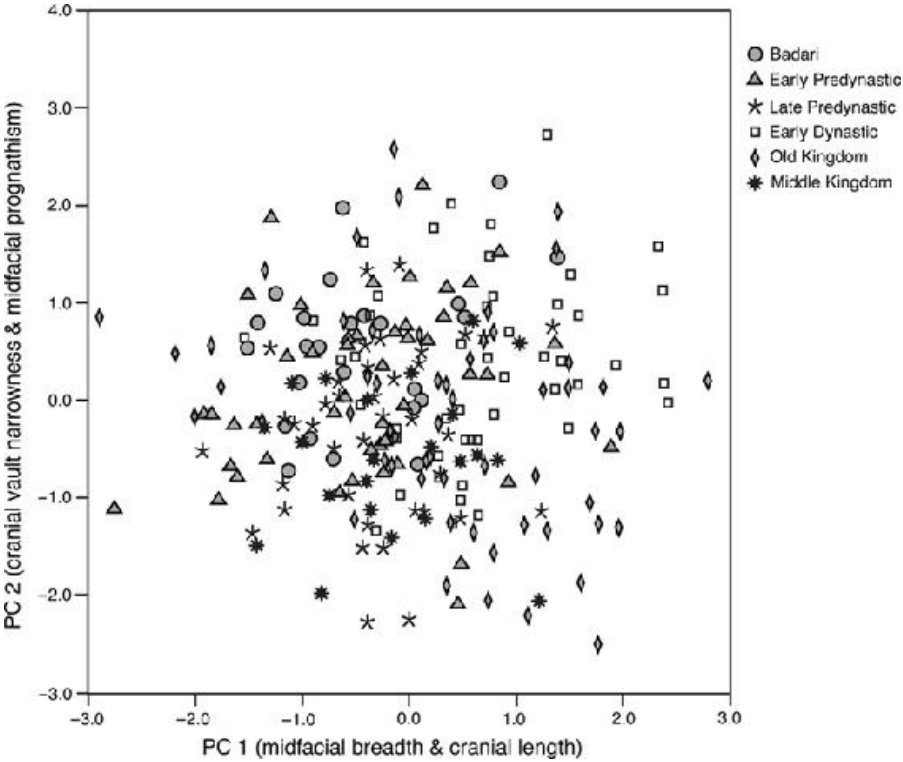

*Figure 1.12*Plot of the first two components of a principal components analysis of measurements taken on 247 adult skulls from six sites (between Giza and Hierakonpolis), explaining 36.1 per cent and 12.9 per cent of the variance seen within the crania. It illustrates, in two dimensions, the nature of heterogeneity. There are trends, for example: the 'Badarian generally exhibit the greatest facial prognathism of the samples studied (demonstrated by their relatively high position on PC2)'. But the wish for clear distinctions in skull morphology by period or by region is something of an illusory goal. After S.R. Zakrzewski, *AJPA* 132 (2007), 505, Fig. 2 (and original chart supplied by S. Zakrzewski). The quotation is also on p. 505.

Samples of skeletons from excavated cemeteries tend to be quite small, those from Egypt being no exception. The statistical pooling process is naturally influenced by the degree of variation from one individual to another, and with small samples – perhaps 20 individuals – there is a danger that the presence of a very few people who were a little unusual in their own day will have a disproportionate effect on how the averages appear. Moreover, time and again it emerges that sets of measurements taken on male skulls differ from those taken on females even allowing for the general natural difference related to stature. This reduces sample sizes still further, more or less by half. Heterogeneity can then be quite marked. Then again, over the kind of long periods of time that archaeologists

deal with there is a chance that a degree of genetic drift has taken place, an accumulation of tiny modifications which in the end make later representatives of the same population look a little different from their ancestors. This is especially likely if the way of life has changed, particularly if this involves diet.[62]

If we are looking for changes to an indigenous population we must first define what that indigenous population was. For Egypt this has meant, in practice, the people represented by burials in predynastic cemeteries, for these are the earliest human remains which have been found in significant quantities. Of these the very earliest belong to the Badarian culture of Upper Egypt, dated to *c*. 4350–3750 BC. Yet in terms of the history of human presence in the Nile valley, otherwise represented only by stone tools, the Badarians and other predynastic groups are actually quite recent. How can we know if predynastic Egyptians were not themselves a population already modified by immigration and so on, ever further back in time (keeping in mind the fact that the Nile valley must have served as a major corridor of travel between Sub-Saharan Africa and the Mediterranean prior to the development of agriculture)? It could well be that the concept of an indigenous population of the Nile valley has to remain only a theoretical possibility and that it will never be identified owing to the extreme rarity of human remains from before the Predynastic (Neolithic) Period. Many tens of thousands of years of human presence had preceded the predynastic groups but smallness of numbers and a simpler style of life have not left us conveniently dense cemeteries to excavate.

A rare exception is a Late Stone Age cemetery at Gebel Sahaba, in the northern Sudan. It contained the skeletons of 58 persons (men, women and children) buried over a period of time somewhere around 14,000 to 12,000 years ago, a remarkably early date for such a find.[63] Primarily a hunting population, from time to time they engaged in conflict with other groups, for almost half those buried had died violently, mostly from flint-tipped weapons. Studies of the physical appearance of these people have concluded that they were distinct from Egyptians of Pharaonic times (the comparative sample being 70 individuals dating from the Predynastic Period to the Middle Kingdom) and Nubians, resembling more closely populations from East and West Africa (though here the samples date to the nineteenth and twentieth centuries AD). A genetic discontinuity in the Nile valley between the time of Gebel Sahaba and the Predynastic Period of Upper Egypt is suggested.

The importance of appreciating that the ancient Egyptians, even those from the early periods, were the result of tens of thousands of years of micro-evolution and of movement is that it prepares one for the difficulties of drawing clear conclusions from the many detailed studies of human skeletal material (often just the skulls) which have been recovered from ancient cemeteries. The subject is, for one thing, dominated by sampling bias. Partly this is natural, for bones are much better preserved in the dry deserts of the south than in the damper soils of the north. This means that it is much easier to compare Upper Egyptians with Nubians and Sudanese than it is to compare Lower Egyptians with the peoples of Palestine and the Near East, another huge area where preservation is usually poor. Partly the bias has been created by archaeologists. Most of the thousands of bodies and bone groups discovered in the nineteenth and over much of the twentieth century they threw away or reburied without record, mistakenly regarding human remains as far less important than the objects found with them. When they did collect they tended to do so from earlier periods at the expense of later periods. The result is that the samples available for study are only a tiny unrepresentative remnant.

As a way of putting the subject into perspective, consider one comparative study of Egyptian skulls that uses data taken from 31 cemeteries spread across roughly 4,000 years from the Badarian Period to the beginning of the Christian era.[64] The skulls total 4,058, but many were not sufficiently well preserved for all the necessary measurements to be taken and so the working total is less (2,886). It might still seem like a reasonable number to work with, except that it represents a span of 4,000 years. That might be 130 generations with a mean age at death of 30 in a population for ancient Egypt of, let us say conservatively, 1,500,000 on average. So during that 4,000 years at least 200,000,000 people will have died.[65] The 2,886 selected skulls are thus a tiny fraction of one per cent. Moreover, over 40 per cent of these come from a single cemetery (Giza) from the Late Period leaving only 60 per cent to represent 30 sites over 4,000 years. In living societies social scientists and opinion-poll analysts are content to work with small samples, but go to great lengths to achieve representative selections. We cannot do that with archaeological data. We have to work with what has accidentally and haphazardly survived. With microscopically small samples and often poor knowledge of who they represent it is not surprising that progress in writing a population history of ancient Egypt is slow.

Then there is the question of methods. Those that are accepted with

confidence in modern forensic investigations compare an unknown individual with data derived from modern reference collections. The ethnic affiliations of the individuals who make up these collections (mainly poor whites and blacks from the cities of the USA) are known from the full range of their characteristics, including the colour of their skin. With ancient remains there are naturally no equivalent reference collections where more is known about the people than what is preserved on their skeletons. Reference collections are the very thing that the anthropologist is attempting to create. Consequently, it cannot be assumed that the refined method of calculation used in modern police cases works to the same degree with ancient populations. A recurrent and disconcerting tendency for the characteristics used for ethnic grouping to differ noticeably between males and females in ancient Egyptian sets of skulls, as if each half of the population had a different origin, should also be taken as grounds for great caution in interpreting the evidence.

Three thousand years of pooling

There is a general acceptance, in part intuitively based, that the size of human populations everywhere gradually increased during prehistoric and early historic periods. The best attempt at reconstructing a curve of increase for ancient Egypt remains Karl Butzer's (published in 1976).[66] It is based upon an assessment of archaeological and geographical factors and pays heed to the broad 'feel' of the historical periods. It displays an overall rise across three millennia though with dips. From a base population for the late Predynastic Period of slightly less than 1,000,000, it peaked at around 5,000,000 in Roman times, with the delta population gradually outstripping that of the valley. In many modern countries, whether the population remains stable or increases or dwindles depends in part upon the natural rate of replacement through births and deaths, and in part upon the balance between immigration and emigration. How much of the upward curve in Butzer's graph represents one rather than the other? A 4,000,000 increase over 3,000 years represents a net increase of around 1,300 per year. If we imagine immigration (voluntary and forced) running at a broad average of 200 per year, which does not seem unreasonable in the light of the various sources (it could, of course, have been 2,000 or more), it would represent 15 per cent of that increase, year on year. The cumulative effect on the gene pool as a whole would have been,

over several centuries, quite significant, not least because immigrants tend to be at their reproductive peak.

When populations come together and interbreed, the physiological consequences are not predictable in a simple fashion. Some traits give an adaptive advantage and survive, others are lost. Moreover, the characteristics that are thrown together through intermarriage are not just the physiological, the aspects that we see, like skin colour or waviness of hair or relative lengths of limbs. They can, for example, be differing degrees of resistance to a particular disease. In the unlikely event that some of the immigrants shared characteristics with some of the modern populations of East Africa, excellence in endurance running (now famous from athletic events) might have been another. This leads one to ask of the fighting characteristics that the Egyptians saw in the Medjay: did these derive wholly from culture or was there a genetic component? Since any functioning body of people is a composite of genes and culture the question is to some extent academic. If the fighting traditions of the Medjay were wholly a matter of culture, that, too, will have had some influence on the aggregation of traits that made up the totality of the ancient Egyptian population and its culture.

In Figure 1.13 I have taken Butzer's population curve and tried to imagine it made up of countless individuals, each marked in a particular way, by traits that could be genetic or could be cultural. The point of the exercise is to make it seem natural and unexceptional to find the variation that does, in reality, show up from sample to sample (represented by individual cemeteries), both over time and from place to place. There is no single ancient Egyptian population to study, but a diversity of local populations. That does not negate the existence of trends, though as yet it is hazardous to identify any particular one. There is, for example, a suggestion of a geographical cline, or chain of variation, running along the Nile valley. It is to be expected simply on the grounds that people tend to marry those from their neighbourhood. In the south of Egypt the population would have been close to, and would have ultimately merged with, that of northern Nubia. One trait was presumably a darkening of skin colour. As one moved north so local populations should, in general, have diverged more from those further south. This ought to mean, if all factors worked equally (and they may not have done), that the population of the north-eastern delta merged with that of southern Palestine.

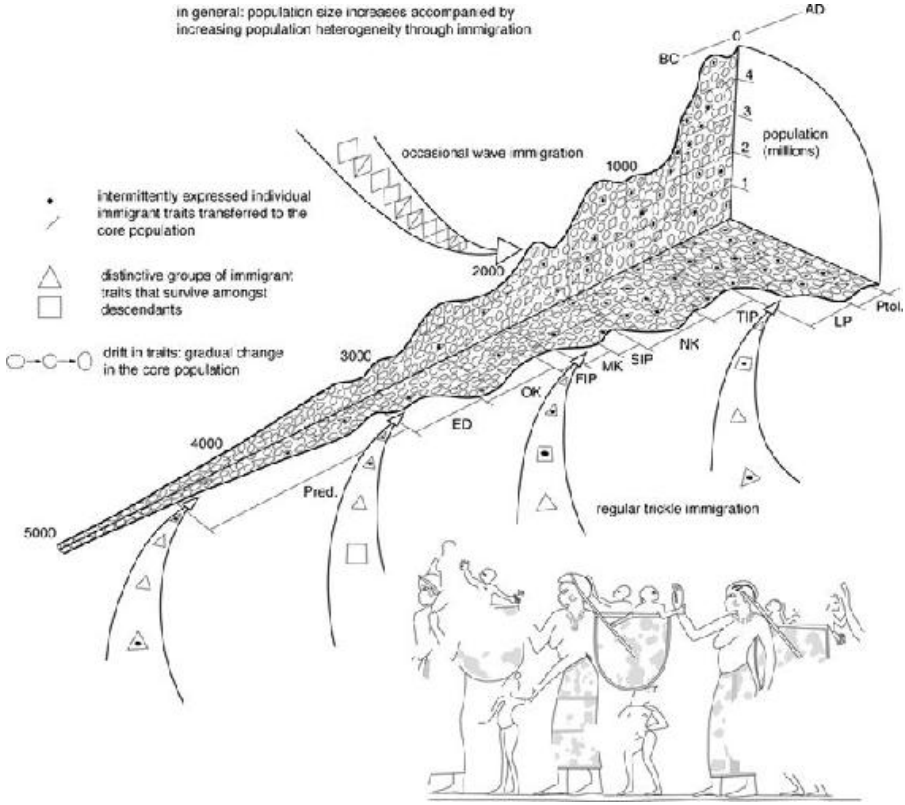

*Figure 1.13*Model of population growth and change in ancient Egypt. The hypothetical rising population curve is that of Butzer, *Hydraulic Civilization*, 85, Fig. 13. As time passes immigrants introduce to the population traits of their own, which I have indicated as a single marker for each one, becoming pooled to differing extents. This takes place against a background of slow 'drift' in overall traits. To the scientist the traits are genetic since only these are properly measurable. But for the peoples themselves cultural traits and markers will have been equally important. Scientists have to ignore them because they are not properly measurable. The aim of the diagram is to convey the complex and increasing mixture of characteristics in the population (as in any population) and thus to discourage simple generalizations as to the appearance of the ancient Egyptians. The inset picture of Nubian women and children – a breeding population, in effect – arriving in Egypt is from the Theban tomb (no. 78) of a scribe of recruits, Horemheb, from the time of Tuthmosis III to Amenhetep III. After N. M. Davies and A.H. Gardiner, *Ancient Egyptian Paintings*, Chicago, IL, UCP, 1936. I, Pl. XXXIX (with some restored lines).

In recent years, studies of skeletal material from ancient Egypt have increased in number and sophistication, drawing upon newly excavated material as well as older reference collections. The general result is the fragmentation of conclusions, a move away from generalization and towards the realization that each sample, thus each cemetery represents a fragment of local population history the background to which is lost. The non-specialist seeks with peril a

grand narrative. This, of course, is what one could predict from general considerations of Egypt's history, as outlined in preceding paragraphs.

An unusual example of a large skeletal sample, excavated and studied by modern methods and where more than usual is known about its origins, comes from portions of a cemetery containing the burials of people from the short-lived city of Amarna (the South Tombs Cemetery; see pp. 372–5) from the late Eighteenth Dynasty (*c.* 1350 BC). The sample includes 319 skulls. Both metric and morphological analyses suggest significant diversity. One of the lead researchers writes:

> Cranial morphology is shaped by genetics, diet, activity, and environment. Therefore, as groups aggregate and live in specific regions their crania take on similar shapes distinctive of ancestral history, which can be used to identify the background of individuals from skeletal remains. At Amarna, the cranial sample is widely diverse, with approximately equal representation of the classic morphological forms of ancestral groups from the south (possibly Nubia), the Mediterranean, and a more peripheral north-eastern region. Some individuals also exhibit a mixed-trait morphology typical of individuals of heterogeneous ancestry. Metric analysis of the Amarna sample of adults with firm sex estimations (178 crania) shows high coefficients of variation for 71 analyzed variables. When compared to other samples from throughout Egyptian history (Badarian through Middle Kingdom), the metric analysis suggests greater cranial diversity and thus population diversity in the Amarna sample than was found in earlier periods (comparative samples from Zakrzewski 2007). High levels of metric diversity coupled with near equal distribution of individuals into the three ancestral groups suggest Amarna was a diverse metropolis with a citizenry derived from all areas of Egypt at the least. More likely, it was an international city with residents from all over the region (Near East to Nubia).[67]

We also have a huge excavated record of the houses and artefacts of the population of which this skeletal material is a sample. Apart from clay tablets written in a Near Eastern language using the cuneiform script (the Amarna Letters; see pp. 280–5, and Figure 6.15, p. 284), this record of the material of living is noticeably non-diverse. It

includes sherds from vessels imported from the Aegean and the eastern Mediterranean, but these are found widely dispersed throughout Egypt and Nubia at this time and are easily explained as traded imports. The archaeological record from the city of Amarna is easily taken to show how 'Egyptians' lived in the New Kingdom. And so it reveals how a common style of material culture can mask a population of widely different origins and, at the same time, the readiness of people of immigrant background to allow themselves, at the material level, to be absorbed into the parent society.

Imagining Egyptians

Television has popularized one way of partially answering the question 'what did the peoples of the past look like?' by demonstrating the technique of facial reconstruction. Trained medical artists reconstruct in modelling-clay (or sometimes on computer screen) the features that originally existed in fleshy tissue over a skull. Pioneered for police work it has been 'successfully' tried on ancient skulls, including a few from Egypt. In a uniquely rich combination of ancient sources, Roman Egypt (mid-first to mid-third centuries AD) has supplied many astonishingly life-like painted portrayals of the dead that accompanied their mummified remains.[68] Many of these people lived in towns in the Fayum that had by this time been settled by Greek immigrants. Whilst (unlike so many earlier immigrants) they retained for a long time much of their Greek culture, as people they were in the position of other immigrant groups who settled over the centuries, and so it would be wrong to say that they were not proper Egyptians. The painted images appear to be portraits, in that family groups share facial characteristics, such as a cleft chin, whilst examination of cases where the mummy has also survived reveals correspondences between the two of age and sex. Facial reconstruction has been carried out on the skulls of four of the portrait owners. Two of the reconstructions closely resemble the portraits, two are rather different, being perhaps more 'African'. With such a small sample it is hard to judge what is going on, and this illustrates the principal limitation of this approach. Facial reconstruction requires not only the presence of the skull itself but also much time of a skilled specialist. It is not feasible to devote this level of intensity to, say, a couple of hundred skulls excavated from a cemetery. So, apart from occasional and virtually random examples, this technique plays a so

far negligible part in assessing the physical similarities and differences in ancient populations.

Does DNA research based on ancient samples have something to offer? It certainly should have, given its astonishing powers to identify the genetic background of living individuals and, increasingly, of individuals recovered through archaeology. It offers the prospect of identifying successive sources of immigration in a way that is independent of other kinds of evidence, as well as the histories of diseases which have afflicted the people concerned. Scientists within the DNA field have differed on how reliable results are from ancient Egyptian human remains, and on whether it is even feasible to expect to find ancient Egyptian DNA material. Yet the analytical techniques are being rapidly refined so that, although at the time of writing useful general conclusions on ancient Egyptian population history drawn from DNA analysis still seem to be some way off, it is likely that, in time, they will contribute an important new source of evidence.[69]

Should we say that the ancient Egyptians were a black people? If we think of the forensic anthropology term 'Negroid', a set of bodily characteristics is available to provide objective descriptions of what the term means. The usage of 'Black', however, varies according to perspective. A more limited use confines it to the people who speak Bantu languages and who, to judge from reconstructed linguistic history, originated in West Africa and subsequently expanded their range to a large part of Sub-Saharan Africa. Other groups, such as the San ('bushmen') people of South Africa, are thus excluded from the category 'Black'. The other extreme is to use it as a synonym for 'African', thus including the ancient Egyptians. At this point one enters the modern polemics of race and racism, and an agenda which is well removed from the evidence of physical anthropology. How the ancient evidence falls into place is that the various groups, Egyptians, Nubians and so on, were – quite simply – themselves, and that even describing each group adequately, allowing for the variation that is normally present, is not straightforward. As is often the case, polemical discourse is a world of its own.

In the end one is entitled to ask: so what? Does our genetic inheritance contribute all that much to who we are, individually and collectively, beyond the fact that we are humans whose biological characteristics vary slightly from person to person? Where we think we have come from easily becomes part of our culture and therefore helps to define us, but that is not the same thing. After all, in the past,

Britons have variously believed that their ancestors were a tribe from Israel or the descendants of Aeneas and a band of refugees from Troy (claims which, if they were ever taken seriously, could have startling political consequences).[70] That culture is influenced by genes is not wholly impossible. But to identify any aspect of such a process lies beyond current knowledge. For working purposes our identities are created by culture and its history. The ancient Egyptians as a physical people are of interest to specialists who study population history, but the Egyptians whom most of us study are, to all intents and purposes, the bearers of a culture. It was a culture subject to processes of change which eventually deleted from the script the elements which initially had served to define it, and substituted instead new ideas and forms of expression which seemed more attractive at successive times, including – long after the timeframe of this book – those pertaining to Greece, and then to Christianity and then to Islam.

For the ancient Egyptians themselves, of course, these avenues of research and speculation were closed. They could peer into their own early origins only via their imaginations, which were shaped by the culture that they had created in historic times. They began from certain assumptions, and these form the basis of the next chapter.

Notes

1 B. Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism*, revised edn, London and New York, Verso, 1991, 6.

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4 Lichtheim, *Literature* II, 197–9. The 'Destruction of Mankind' is part of a longer text, described in E. Hornung, *The Ancient Egyptian Books of the Afterlife*, Ithaca, NY, and London, CoUP, 1999, 148–52.

5 Hatshepsut's temple at Deir el-Bahari: *Urk*. IV, 345.14; translation: E. Blumenthal, I. Müller and W.F. Reineke, *Urkunden der 18. Dynastie, Übersetzung zu den Heften 5–16*, Berlin, Akademie-Verlag, 1984, 25.

6 W.M.F. Petrie, *Ancient Egypt* (Journal of the British School of Archaeology in Egypt, 1914–35), 1917, 58.

7 Lichtheim, *Literature* I, 104.

8 Hieroglyphic text: Sethe, *Lesestücke*, 83–4; translations: Lichtheim, *Literature*, I, 119; Simpson, *Literature*, 338; Parkinson, *Voices*, 45.

9 Peden, *Historical Inscriptions*, 48–9; Kitchen, *Ramesside Inscriptions* V, 65; Kitchen, *Ramesside Inscriptions (Trans)* V, 50.

10 Herodotus, *Histories*, Book II, 39; A.B. Lloyd, *Herodotus Book II. Commentary 1–*

98, Leiden, Brill, 1976, 183–4.

11 Genesis 43.32; see also 46.34; D.B. Redford, *A Study of the Biblical Story of Joseph (Genesis 37–50)*, Leiden, Brill, 1970, 235.

12 Mohammed Abd el-Maksoud, *Tell Heboua (1981–1991): enquête archéologique sur la Deuxième Période Intermédiaire et la Nouvel empire à l'extrémité orientale du Delta*, Paris, Éditions Recherche sur les Civilisations, 1998; D. Valbelle and Mohammed Abd el-Maksoud, 'La frontière orientale du Delta depuis le bronze moyen jusqu'au bronze récent.' In A. Caubet, ed., *L'acrobate au taureau: les découvertes de Tell el-Dabʾa (Égypte) et l'archéologie de la Méditerranée orientale (1800–1400 av. J.-C.)*, Paris, Musée du Louvre, 1999, 85–98; Mohammed Abd el-Maksoud and D. Valbelle, *RdÉ* 56 (2005), 1–43.

13 Hieroglyphic text: Sethe, *Lesestücke*, 84–5; translations: S.T. Smith, *JARCE* 28 (1991), 107–32, p. 126; Smith, *Askut*, 12; Adams, *Nubia*, 185.

14 Wilkinson, *Annals*, 141; Strudwick, *Texts*, 66.

15 S. Snape, *ASAE* 78 (2004), 149–60; S. Snape, 'A stroll along the corniche: coastal routes between the Nile delta and Cyrenaica in the Late Bronze Age.' In F. Förster and H. Riemer, eds, *Desert Road Archaeology in Ancient Egypt and Beyond*, Cologne, Heinrich-Barth-Institut, 2013, 439–54; S. Snape, *EA* 11 (1997), 23–4; L. Habachi, *BIFAO* 80 (1980), 13–30.

16 P.C. Smither, JEA 31 (1945), 3–10; Parkinson, *Voices*, 93–5; Vogel, *Festungen*, 78–87.

17 Text: A.H. Gardiner, *Late-Egyptian Miscellanies*, Brussels, Fondation Égyptologique Reine Élisabeth, 1937, 76–7; translations: Caminos, *Miscellanies*, 293.

18 Weni: Lichtheim, *Literature* I, 19–20; Strudwick, *Texts*, 352–7. The 'friendly Nubians'/'Nubian mercenaries' appear in the Dahshur Decree of Pepi I, H. Goedicke, *Königliche Dokumente aus dem Alten Reich*, Wiesbaden, Harrassowitz, 1967, 56, 62–3; Strudwick, *Texts*, 104 and n. 8; Papazian, *Domain*, 134–5.

19 H.G. Fischer, *Kush* 9 (1961), 44–80; M. Bietak, 'Zu den Nubischen Bogenschützen aus Assiut. Ein Beitrag zur Geschichte der Ersten Zwischenzeit.' In Posener-Kriéger, *Mélanges Gamal Mokhtar*, 87–97. For Kubbaniya see H. Junker, *Bericht über die Grabungen der Akademie der Wissenschaften in Wien auf den Friedhöfen von El-Kubanieh-Nord, Winter 1910–1911*, Vienna, Hölder, 1920; the Hierakonpolis find is reported in R. Friedman, *EA* 19, 2001, 30; and in *Sudan and Nubia* 5 (2001), 29–38; Gebelein: Bard, *Encyclopedia*, 338–40. 'Pan-grave' sherds (regarded as typical of this group) from Thebes are published by D. Redford, S. Orel, S. Redford and S. Shubert, *JARCE* 28 (1991), 99–103.

20 J. Malek, *EA* 2 (1992), 18. A preliminary translation is H. Altenmüller and A.M. Moussa, *SAK* 18 (1991), 1–48; partly E.S. Marcus, *Ä&L* 17 (2007), 137–90. General discussion, Lehner, 'Labor', 480–2.

21 Hayes, *Papyrus*, 87–109, 148–9; Quirke, *Administration*, 148–9.

22 M. Petrik, 'Foreign groups at Lahun during the late Middle Kingdom.' In E. Bechtold, A. Gulyás and A. Hasznos, eds, *From Illahun to Djeme: Papers Presented in Honour of Ulrich Luft*, Oxford, Archaeopress, 2011, 211–26; U. Luft, in Quirke, *Lahun Studies*, 29–30.

23 Kitchen, *Ramesside Inscriptions* II, 206; Kitchen, *Ramesside Inscriptions (Trans)* II, 67.

24 'Rhetorical Stela' of Rameses III from Deir el-Medina, Peden, *Historical Inscriptions*, 64–5; Kitchen, *Ramesside Inscriptions* V, 90–1; Kitchen, *Ramesside Inscriptions (Trans)* V, 70.

25 Tuthmosis IV: Stewart, *Petrie Collection* 1, 4, Pl. 3.1; Amenhetep III: *Urk.* IV, 1649.12; B.G. Davies, *Egyptian Historical Records of the Later Eighteenth Dynasty*, fasc. IV, Warminster, A&P, 1992, 2 translates 'served by the towns of the Levant'; Hittite field: *Urk.* IV, 2109.16; B.G. Davies, *Egyptian Historical Records*

of the Later Eighteenth Dynasty, fasc. VI, Warminster, A&P, 1995, 65.

26P. Harris I: 77.5–6; Peden, *Historical Inscriptions*, 217; Grandet, *Harris I*, I, 337.

27P. Harris I: Grandet, *Harris I*, I, 10.15; 31.8; 51a.9; 10.8; I, 236, 266, 292 and 235.

28Davies, *Historical Inscriptions*, 164–5; Kitchen, *Ramesside Inscriptions* IV, 9; Kitchen, *Ramesside Inscriptions (Trans)* IV, 8.

29Pritchard, *Texts*, 247 provides a translation of the text. Butzer, *Hydraulic Civilization*, 80–7 presents a population estimate.

30Wilkinson, *Annals*, 141–2; Strudwick, *Texts*, 66; also the discussion by Lehner, 'Labor', 443, 477–80.

31Eyre, 'Work in the New Kingdom', 188–90; the Theban work record: W.C. Hayes, *JEA* 46 (1960), 29–52.

32The exact numbers are 51, 181, 513, 702, 522, 197, 65 and 295; see Helck, *Beziehungen*, 347.

33Moran, *Amarna Letters*, letter no. EA 288; other examples are EA 17, EA 19, EA 44, EA 268, EA 301, EA 309, RA 31.

34P. Harris I: 31.8; Grandet, *Harris I*, I, 266.

35Davies, *Rekh-mi-rē*ʾ, 29, Pls XXI–XXIII.

36A key witness is Thucydides I.29.5; 98.2; II.67.4; III.50.1; 68.2; IV.48.4; V.32.1; 116.4; VI.62.3–4; VII.87.3–4; also Xenophon, *Hellenika*, II.2.3–23.

37Both are quotes from the Rhetorical Stela of Rameses III (Deir el-Medina): Peden, *Historical Inscriptions*, 65; Kitchen, *Ramesside Inscriptions* V, 91; Kitchen, *Ramesside Inscriptions (Trans)* V, 70.

38P. Anastasi I: Wente, *Letters*, 106.

39The land register is Papyrus Wilbour. Convenient summary discussions are as follows: O'Connor, 'Geography of settlement', 681–5, esp. pp. 690–5; Adams, 'Textual window'; J. P. Emanuel, *JAEI* 5 (1) (2013), 14–27. The legal document is translated by A.H. Gardiner, *JEA* 26 (1940), 23–9. Shelley Wachsmann, *The Gurob Ship-cart Model and Its Mediterranean Context*, Ed. Rachal Foundation Nautical Archaeology Series, College Station, TX, A&M University Press, 2013 suggests a man of Sherden ancestry as the possible owner.

40Lichtheim, *Literature* II, 77; Davies, *Historical Inscriptions*, 185; Kitchen, *Ramesside Inscriptions* IV, 18; Kitchen, *Ramesside Inscriptions (Trans)* IV, 15.

41P. Harris I: Peden, *Historical Inscriptions*, 219–21; Grandet, *Harris I*, I, 338–9; II, 255–67. The word translated here as 'foreigners' is derived from the common word for 'other' but, by this time, was used in a way which also embraced the sense of 'outsiders', 'aliens'; see Caminos, *Miscellanies*, 350.

42P. Bologna 1086.22–3 = Wente, *Letters*, 125; Kitchen, *Ramesside Inscriptions* IV, 79–80; Kitchen, *Ramesside Inscriptions (Trans)* IV, 65.

43A.H. Gardiner, *JEA* 26 (1940), 23–9; C.J. Eyre, *JEA* 78 (1992), 207–21, who also summarizes the second case. On slavery in Egypt see Bakir, *Slavery*; Eyre, 'Work in the New Kingdom', 208–11; Zingarelli, *Trade*, 99–109.

44*Urk*. IV, 690.2; Helck, *Beziehungen*, 350.

45Owner of Theban tomb 343, Guksch, *Grab des Benja*, 43–4, Tafel 13.

46Helck, *Beziehungen*, 353, no. 5.

47A.R. Schulman, *CdÉ* 65 (1990), 12–20.

48Simpson, *Heka-nefer*. A background study is T. Säve-Söderbergh, 'Te-Khet, the cultural and sociopolitical structure of a Nubian princedom in Tuthmoside times.' In W. V. Davies, ed., *Egypt and Africa: Nubia from Prehistory to Islam*, London, BM and EES, 1991, 186–94.

49W.M.F. Petrie, *Diospolis Parva: the Cemeteries of Abadiyeh and Hu 1898–9*, London, EEF, 1901, Chapter XI; J. Bourriau, 'Nubians in Egypt during the

Second Intermediate Period: an interpretation based on the Egyptian ceramic evidence.' In Do. Arnold, ed., *Studien zur altägyptischen Keramik*, Mainz, von Zabern, 1981, 25–41; M.C. Gatto, *JAEI* 6 (1) (2014), 11–28; K. Liszka, *JAEI* 7 (2) (2015), 42–60; C. Näser, 'Nomads at the Nile: towards an archaeology of interaction.' In H. Barnard and K. Duistermaat, eds, *The History of the Peoples of the Eastern Desert*, Los Angeles, CA, UCLA, Cotsen Institute of Archaeology Press, 2012, 81–90.

50 W.V. Davies, *EA* 23 (2003), 3–6; *Sudan and Nubia* 7 (2003), 52–7. The prominent family of mayors and other leading citizens of El-Kab at this time and on into the New Kingdom were themselves descended from foreigners, perhaps an earlier generation of Medjay who had settled, adopted Egyptian culture and changed allegiance. The evidence comes from some of their names, including one who was called 'Medjay-man'.

51 A convenient introduction to Avaris and the culture of the time remains Bietak, *Avaris*. Amongst the many subsequent reports of discoveries relevant to the period are M. Bietak, N. Math and V. Müller, *Ä&L* 22–3 (2012–13), 17–53; E. Czerny, *Tell el-Dabʾa* XXII: *'Der Mund der beiden Wege': die Siedlung und der Tempelbezirk des Mittleren Reiches von Ezbet Ruschdi*, 2 vols, Vienna, Austrian Academy of Sciences, 2015. On the wider background see A.-L. Mourad, *Rise of the Hyksos: Egypt and the Levant from the Middle Kingdom to the Early Second Intermediate Period*, Oxford, Archaeopress, 2015.

52 The revealing text of Kamose's stelae is translated in Simpson, *Literature*, 345–50; Pritchard, *Texts*, 232–3, and Pritchard, *Texts, Supplement*, 554–5.

53 Davies, *Historical Inscriptions*, 151–88; Kitchen, *Ramesside Inscriptions* IV, 2–12; Kitchen, *Ramesside Inscriptions (Trans)* IV, 2–10; Peden, *Historical Inscriptions*, 7–22, 37–62, 214–17; Kitchen, *Ramesside Inscriptions* V, 20–7; Kitchen, *Ramesside Inscriptions (Trans)* V, 18–24; Kitchen, *Ramesside Inscriptions* V, 58–66; Kitchen, *Ramesside Inscriptions (Trans)* V, 47–52; Grandet, *Harris I*, I, 336–8; II, 237–61.

54 Although it has become a topic of research, e.g. C. Hubschmann, *JARCE* 46 (2010), 173–87; L. Hulin, *JAEI* 1 (1) (2009), 18–21; F. Simpson, 'Evidence for Late Bronze Age Libyan culture at the New Kingdom Egyptian fortress of Zawiyet Umm el-Rakham.' In A. McDonald and C. Riggs, eds, *Current Research in Egyptology 2000*, Oxford, Archaeopress, 2000, 97–102. The complex historical and archaeological background to this displacement of peoples is outlined in Sandars, *Sea Peoples*; E.D. Oren, ed., *The Sea Peoples and Their World: a Reassessment*, Philadelphia, PA, The University Museum, 2000.

55 Kitchen, *Third Intermediate*, 105–6, 488, Table 19; M. Malinine, G. Posener and J. Vercoutter, *Catalogue des stèles du Sérapéum de Memphis* I, Paris, Imprimerie Nationale, 1968, no. 31, 30–1, Pl. 10.

56 Herihor's sons: Epigraphic Survey, *Khonsu*, 11–13, Pl. 26; Kitchen, *Third Intermediate*, 540–1. K. Jansen-Winkeln, *ZÄS* 119 (1992), 22–37 initiated controversy over whether or not Herihor was the first in this role. For background: A. Leahy, ed., *Libya and Egypt c 1300–750 bc*, London, Society for Libyan Studies, 1990; S. Snape, 'The emergence of Libya on the horizon of Egypt.' In D. O'Connor and S. Quirke, eds, *Mysterious Lands: Encounters with Ancient Egypt*, London, UCL Press, 2003, 93–106.

57 S. Ousley, R. Jantz and D. Freid, *AJPA* 139, no. 1 (May 2009), 68–76, quote from p. 68. This paper is part of a Symposium Issue of this journal, entitled: 'Race reconciled? How biological anthropologists view human variation.'

58 Quoted in J.H. Retherford, *AJPA* 139 (2009), 16–22, quote on p. 20.

59 S. Ousley, R. Jantz and D. Freid, *AJPA* 139, no. 1 (May 2009), 74.

60 S. Ousley, R. Jantz and D. Freid, *AJPA* 139, no. 1 (May 2009), 72.

61 A revealing survey of the literature on this subject, which has quite a long history, is R. Derricourt, *Antiquity Imagined: the Remarkable Legacy of Egypt and the Ancient Near East*, London and New York, Tauris, 2015, 130–70. Several thoughtful papers will be found in D. O'Connor and A. Reid, eds, *Ancient Egypt in Africa*, London, Taylor & Francis, 2003. Personal teaching experience prompted A.M. Roth, 'Building bridges to Afrocentrism: a letter to my Egyptological colleagues.' *NARCE* 167 (Sept. 1995); 168 (Dec. 1995).

62 S.R. Zakrzewski, *AJPA* 132 (2007), 501–9.

63 F. Wendorf, 'Site 117: a Nubian Final Paleolithic graveyard near Jebel Sahaba, Sudan.' In F. Wendorf, ed., *The Prehistory of Nubia* II, Dallas, TX, Southern Methodist University, 1968, 954–95; J.E. Anderson, 'Late Paleolithic skeletal remains from Nubia.' In ibid., 996–1040; F. Wendorf and R. Schild, *The Wadi Kubbaniya Skeleton: a Late Paleolithic Burial from Southern Egypt*, Dallas, TX, Southern Methodist University, 1986; T.W. Holladay, *International Journal of Osteoarchaeology*, Wiley Online Library, 19 May 2013; DOI: 10.1002/oa.2315. A good modern treatment of the origins of human groups in Africa is M.M. Lahr, *The Evolution of Modern Human Diversity: a Study of Cranial Variation*, Cambridge, CUP, 1996, especially Ch. 11.

64 F.W. Rösing, *Qubbet el Hawa und Elephantine: zur Bevölkerungsgeschichte von Ägypten*, Stuttgart and New York, Fischer, 1990.

65 I am grateful to Robert McCaa, Professor of History at the University of Minneapolis, for guidance in this matter.

66 Butzer, *Hydraulic Civilization*, 80–7.

67 Personal communication by Gretchen Dabbs of the University of Southern Illinois, one of the anthropologists engaged on the study of the Amarna material, ahead of the detailed publication of the data. The comparative metric data are taken from the study by Zakrzewski cited in note 62.

68 J. Prag and R. Neave, *Making Faces: Using Forensic and Archaeological Evidence*, London, BM, 1997, ch. 3; E. Doxiadis, *The Mysterious Fayum Portraits: Faces from Ancient Egypt*, London, T&H, 1995; S. Walker and M. Bierbrier, *Ancient Faces: Mummy Portraits from Roman Egypt*, London, BM, 1997.

69 See the reviews J. Marchant, *Nature* 472 (2011), 404–6; www.nature.com/news/2011/110427/full/472404a.html; *Nature* 12 April (2013), www.nature.com/news/egyptian-mummies-yield-genetic-secrets-1.12793.

70 The Trojan origins of the Britons (the pre-Saxon inhabitants of the British Isles) begins the long, detailed and largely made-up *The History of the Kings of Britain* written (in Latin) by Geoffrey of Monmouth and completed in 1136 AD. (An English translation by L. Thorpe is published by Penguin Books, London, 1966.) Then there is a sixteenth-century writer from the Upper Rhine who expounded that 'from the time of the Creation onwards it was not the Jews but the Germans who were the Chosen People. Adam and all his descendants down to Japhet, including all the Patriarchs, were Germans speaking German; other languages – Hebrew among them – came into existence only at the Tower of Babel. It was Japhet and his kin who first came to Europe, bringing their language with them.' Quoted in N. Cohn, *The Pursuit of the Millennium: Revolutionary Millenarians and Mystical Anarchists of the Middle Ages*, 3rd edn, London, Pimlico, Random House, 1993, 123. Not long before, Jan van Gorp had argued that of all surviving languages, Flemish was closest to the primordial language of Adam. Quoted in D. Stolzenberg, *Egyptian Oedipus: Athanasius Kircher and the Secrets of Antiquity*, Chicago, IL, and London, UCP, 2013, 44. One of the uses of the study of the past is to create a critical framework for ideas which, whilst having spontaneous appeal, also have dangerous potential. Invented ancestry is one of the most potent.

2

The intellectual foundations of the early state

The inescapable state

With the imagined community – the nation – people feel that they share bonds of common interest and inherited values with others, most of whom they will never see. It is a vision of people. By contrast, the state is a vision of power, a mixture of myth and procedure that twines itself amidst the sense of community, giving it political structure. In the modern world the state has become the universal unit of supreme organization. No part of the land of planet Earth does not belong to one, although events in the Middle East and North Africa in the early twenty-first century have shown that legally constituted states are not necessarily as permanent as it had previously seemed. They can face dissolution and with it the reappearance of the turmoil and violence of state formation. The driving force, however, is not a return to an egalitarian order, the discarding of the idea of hierarchical authority and coercion, but the assertion by groups who have felt excluded and now wish to have the instruments of state power to wield for themselves.

What are the roots of this condition, this vast surrender by the many and presumption by the few? People have recognized the state as an abstract entity only since the time of the classical Greeks. But the real history of the state is much longer. If we move further back in time to early complex societies – of which Egypt was one – we can observe the basic elements of modern states already present and functioning vigorously, yet doing so in the absence of objective awareness of what was involved. The existence of the state was either taken for granted or presented in terms which do not belong to the vocabulary of reason and philosophy which is part of our inheritance from the classical world. We must accordingly make allowances if we are not to miss important truths. We must not confuse substance with language. The growth in the mechanisms of the state, as with other

products of the mind, has been a process of addition. The ideas and practices that we associate with more modern times have been grafted on to a core which has remained fixed and basic since the appearance of the first states in the ancient world. The study of ancient history exposes this core and thus the bedrock of modern life.

Fundamental to the state is an idealized image of itself, an ideology, a unique identity. It sets itself goals and pursues them by projecting irresistible images of power. These aid the mobilization of the resources and energies of the people, characteristically achieved by bureaucracy and institutions, to whose members are delegated the power of sanction from the ruler (thus, the act of forbidding someone to do something, backed up by the threat of punishment). Dominance hierarchy is thereby enabled across a population of significant size. We can speak of it as an organism, even as a person, because, although made by individuals, as a corporate group it takes on a life of its own and, in so doing, gains collective intentionality. Ideology, images of earthly power, the enabling force of bureaucracy, these are some of the fundamental elements of states both ancient and modern. They contain and reinforce the roles of the state's leaders as effectively as they do those of its people, and bear it onwards in times of weak leadership. They provide legitimacy for the way things are. These are themes that will recur throughout this book.

Ideology and legitimacy

Ideology has become one of the shaping processes of modern times. It is a distinctive filter through which a society sees itself and the rest of the world, a body of thought and symbol which explains the nature of society, defines its ideal form, and justifies action to achieve that ideal. We might consider using the word with strictest regard to its origin only to refer to the political philosophies of the nineteenth and twentieth centuries AD, of which Marxism supplies the paradigmatic example. Because of their immediate earthly concerns ideologies might also appear to contrast with religions, with their appeal primarily to the personal concerns of individuals and to their redemption. But this convenient contrast between ideology and religion reflects the viewpoint of modern western culture. Islam and Judaism, for example, are concerned equally with personal righteousness and with the form that human society should take on earth. Both prescribe a complete way of life, including a code of law.

Moreover, the very contrast between ideology or political philosophy on the one hand and religion on the other obscures how much they have in common – unprovable knowledge and promises or forecasts taken upon trust (mainly on the basis of particular highly regarded texts); deference towards an idea centred on figures who can be real (though often dead) or imagined (gods); all this expressed in formal and normally collective behaviour and language, often militant, and demands of loyalty which are so strong as to create a separate identity, the category of followers, loyalists or believers. Beginning (it would seem) in the eastern Mediterranean region and the Near East in the latter part of the first millennium BC, a psychological watershed was passed (its origins poorly documented and understood). Logic, and with it greater consistency of thinking and refinement in the defining of categories, was identified. It inspired some to philosophy (taking root particularly in the Greek-speaking world) where debate was an essential feature. Epicurus belongs here. It drove others in a different direction, to a sharper perception of what it meant to be loyal to an abstraction, to a transcendental idea (most obviously monotheism). The relish of being right became matched by the relish of accusation against those on the other side of the divide. In the longer run, down to our own time, monotheism has been joined by nationalism (including its more extreme version, national socialism) and international communism as variant expressions of the widespread urge to belong to a self-selecting elite with a mission to purge.

As we have seen in Chapter 1, the desirable category for ancient Egypt was simply to be an Egyptian, a category defined by behaviour rather than by inner commitments. For much of the time it was enough to offer loyal service and, by speech and dress especially, to conform to the Egyptians' own stereotype of themselves. That community, so simply yet so confidently self-defined, occupied a place in the world which was the centre of order, terrestrial and cosmic. That order came from the fact that the role of Pharaoh was pivotal to the knowledge which the Egyptians had developed as to the nature of the forces – mostly invisible yet accessible within the mind – which governed existence (and which will be explored below). It was, however, liable to disturbance by fallible, incautious kings and so required constant care and attention through formalized behaviour and pageant, as well as through occasional more forceful reminders in the form of openly critical texts.

It seems entirely appropriate to use the term ideology to cover the

Egyptian vision of the state, embedded within knowledge of divine forces yet politically valid and constantly stated in powerful symbolic terms. It was a consciously created framework within which the Pharaonic state functioned. In particular, it satisfied the need that societies feel, that the power that rules them should possess legitimacy. In periods of stable rule, people are inclined to take for granted that whoever is ruling them is doing so legitimately. Familiarity coupled with success suppresses the question, why him or them? But when the source of power changes or is disrupted, for whatever reason, and people become aware that there are alternatives, then the quest for legitimacy becomes urgent. Rebellion and civil war are the penalties for failure.

Legitimacy of government remains very much an active topic in the modern world. Does it, or should it, derive from armed power that it is perilous to challenge, from the ballot box in a democratic system that answers to logic, or from the awe and mystery surrounding the hereditary rule of royalty or the inspired selection of leaders of a religion? In ancient Egypt, the overriding need to provide legitimacy at times of change, even if the new ruler was a usurper of non-royal origin or even foreign and an invader, obliged those who provided support for the new ruler to present him as conforming to the received image of a divine king that was rooted simultaneously in the past and in core knowledge of the universe.

Yet ideology was not the sole source of order. Two others come to mind. It is likely that, inherent in the early development of the state in Egypt, corporate groups emerged, in the form of locally based extended families with patriarchal leaders and numerous dependants and clients held together by dependence and gratitude. Often the leaders held the title 'nomarch' (in effect, 'governor of a province' or 'nome') or 'mayor' and had responsibility for local shrines and temples. Such groups, who came to be centred in provincial towns, existed alongside but were only partially integrated into a bureaucratic system which had its own implicit ideology of social ordering that was never raised to the level of a fully formulated conscious scheme. These sources of order will be explored in Chapters 4 to 6.

The formal ideology of ancient Egypt stressed three themes: continuity with the past; a mystic territorial claim of unity over geographical and political subdivisions; and stability and prosperity through the wise and respectful government of kings. It also took for granted, as did the ancient Egyptians as a whole, the notion that those

who lived in the Nile valley under the rule of Pharaoh formed the imagined community of 'Egyptians'.

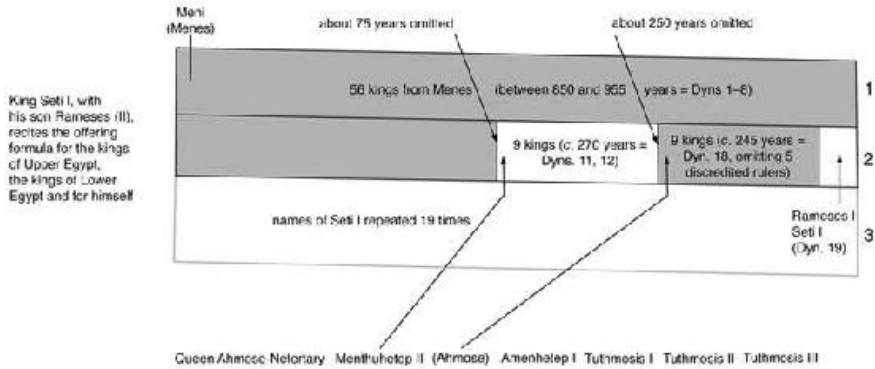
The Egyptians' view of the past

Ideology requires a past, a history. For a dynamic ideology of change, such as Marxism, the past has to be unsatisfactory, an imperfect time whose shortcomings are the spur for action, for revolution. The past exists in order to be rejected. More commonly, however, societies embrace the past, or some parts of it, with respect. This can lead to the thought that the present shape of society has fallen from an earlier, proper condition. Thus the latter part of the twentieth century AD saw the re-emergence of a mode of Islamic thinking that seeks to establish once again – as it was for a relatively limited time in the Middle Ages – a single, disciplined, transnational Islamic community under the leadership of a *Khalifa* (Caliph, the 'messenger'). Some of its adherents see that, in practice, only through violence can society be cleansed of corruption and this be achieved. With the appearance in northern Iraq and Syria of the Islamic State in 2014 it has presented the world with a fresh example of the process of state formation, illustrating just how violent the release of energy inherent within the process can be: ideas rooted in the past combined with modern weapons; atavism serviced by technology.

Knowledge of the past can contain facts, often names of prominent people and their deeds, but from the facts that are selected and the significance that is given to them, the past is also a partial invention. It easily becomes a myth, and as such can provide a model for the present. Ancient Egypt belongs firmly in this category. It thought it knew its own past, and fitted the images so derived within the myth-world of ideology and this, in turn, shaped the way that the people regarded their current rulers. Were they legitimate or not?

The past for the ancient Egyptians had a straightforward and rather prosaic course. No epic narrative of events spanned past generations, no great theme or tale of destiny urged a moral on the living. The Egyptians and their neighbours had always, so it seemed, lived in their respective homelands. The past was a model of order, a continuous and almost exclusively peaceful succession of reigns of previous kings, each one handing the throne on to his successor in a single direct linear sequence. This mirrored how things really were during the 'great' periods of peace and stability.

Continuity emerges most explicitly from the lists of dead kings that the Egyptians themselves compiled. The majority derive from the New Kingdom, by which period the Egyptians had accumulated a millennium and a half of history, from *c.* 3085 to 1250 BC.[1] The best known is to be found carved in fine low relief on one of the inner walls of the temple of King Seti I at Abydos (*c*. 1290 BC; Figure 2.1). At the left end of the scene stands Seti I himself, accompanied by his eldest son, Rameses (later Rameses II), in the act of making offerings. The beneficiaries of the offerings, as the accompanying text makes clear, are 75 royal ancestors, each represented by a single cartouche, together with King Seti I himself, owner of the seventy-sixth cartouche, and whose own twin cartouches are then repeated 19 times to fill the bottom row. The order of the cartouches appears to be more or less correct historically, but numerous kings are omitted, primarily those from periods of internal weakness and division, periods of transition. As Figure 2.1 shows, the largest group of cartouches (39 of them) covers the earliest kings. The next 17 belong to a line of immediately ensuing kings whose rule probably extended only over the local Abydos region (and so, from our modern perspective, from an Intermediate Period). The whole scene represents a generous version of a common temple cult of royal ancestors. Normally the cult focused on individual statues placed in a temple by individual kings. At Abydos a list of names achieved the same end, more comprehensively but also more economically. Correct chronological order was not essential, however (or was not always achieved). Another king list, in the temple of Amun-Ra at Karnak, and of the reign of Tuthmosis III, represents each of a list of 61 kings by a picture of a statue rather than by a simple cartouche. But with this list the kings appear not to be in correct chronological order.



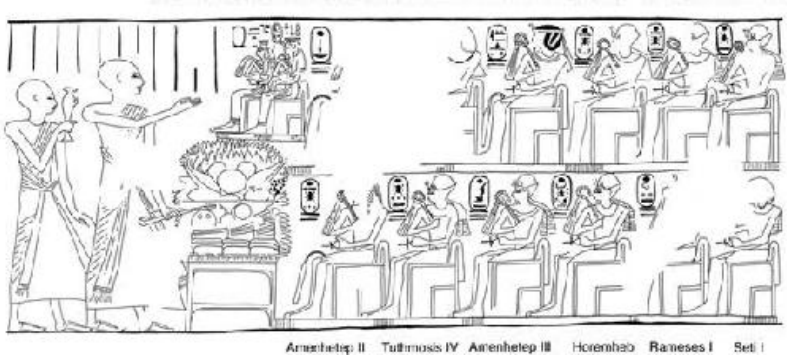


Figure 2.1Above. Legitimizing the present by revering an edited version of the past: King Seti I (and prince Rameses) present offerings to the names of kings made up into a single continuous sequence which connected Seti I to Meni (Menes), the earliest king of whom the Egyptians had a firm record. In the accompanying diagram the names have been divided into blocks representing periods of legitimate rule as interpreted by the staff of the Abydos temple. The gaps in 'real' time and history, visible to ourselves, were periods to which a stigma was attached. The weighting of the list towards kings of earlier periods is striking, presumably because this gave a more intense feeling of antiquity. The weighting has been partly achieved by including the kings of the Eighth Dynasty, whose ephemeral reigns continued the rule of the great Memphite kings of the Old Kingdom, but in reduced circumstances. Temple of Seti I at Abydos (*c*. 1290 BC). *Below*. Private reverence of the ruling house and its ancestors, by Amenmes, the chief priest of an image of the cult of the long-dead King Amenhetep I called 'Amenhetep of the Forecourt'. Amenmes lived towards the beginning of the Nineteenth Dynasty. From his tomb at western Thebes (no. 19), after G. Foucart, *Le tombeau d'Amonmos*, Cairo, IFAO, 1935, Pl. XIIB, itself a copy made in the nineteenth century AD by Thomas Hay.

An extension to the scope of this royal ancestor cult occurs in the tomb of a high official at Saqqara of the reign of Rameses II, who was an overseer of works named Tenroy.[2] At the centre of the scene is a list of 57 cartouches of earlier kings, in correct order. Tenroy asks them in a prayer to grant him a share of the daily offerings that were made to them in the temple of Ptah at Memphis. A similar mixture of expectation and reverence doubtless underlies other New Kingdom tomb scenes where offerings and prayers are made to deceased kings. The tomb at Thebes of the priest Amenmes (Figure 2.1), for example, shows him worshipping the statues of 12 New Kingdom Pharaohs regarded as legitimate, plus the founder of the Middle Kingdom, Nebhepetra Menthuhetep II (*c*. 2066–2014 BC). Again the chronological ordering is correct.

Although these lists are relatively late, the practice of honouring named royal ancestors was an old one. The pious regard shown by kings of the Twelfth Dynasty towards members of the preceding Eleventh Dynasty, whose power they had usurped, also reveals that the search for continuity in kingship – the key to legitimacy – could transcend the political details of dynastic succession.[3]

The fact that most lists put their selection of kings into correct chronological order reflects a natural Egyptian inclination towards the keeping and archiving of administrative records. The archival element is very evident in the lists of the Palermo Stone (Figure 2.2). This name is given to a group of fragments of a black basalt slab, evidently carved during the latter part of the Fifth Dynasty (*c*. 2350 BC). Most of the design consists of horizontal rows of compartments, each one separated by a vertical line with curving top, which is, in fact, the hieroglyphic sign for 'year' (another example is in Figure 2.18 (4), p. 95). Each of the compartments contains a summary of the principal events in a single year of kings whose names run across the top of the appropriate block of compartments. The events tell us what things the Egyptians of the time thought were important. They are a mixture of festivals, the creation of statues of the gods, occasional warfare, regular taxation, and, in a separate subdivision, the precise height of that year's Nile flood. As time passed, the compilers' preferences changed somewhat, introducing a degree of inconsistency into the kinds of things recorded, and they succumbed to an urge to make the entries longer.[4] The Palermo Stone illustrates an interest not only in the names of past kings but in the deeds by which they deserved to be remembered and revered: honouring the gods, the guarantee of good administration and hence of prosperity, victory over the enemies of

good order who lived beyond Egypt's frontiers. This kind of chronicle may have provided the basis for the later summary lists of kings.

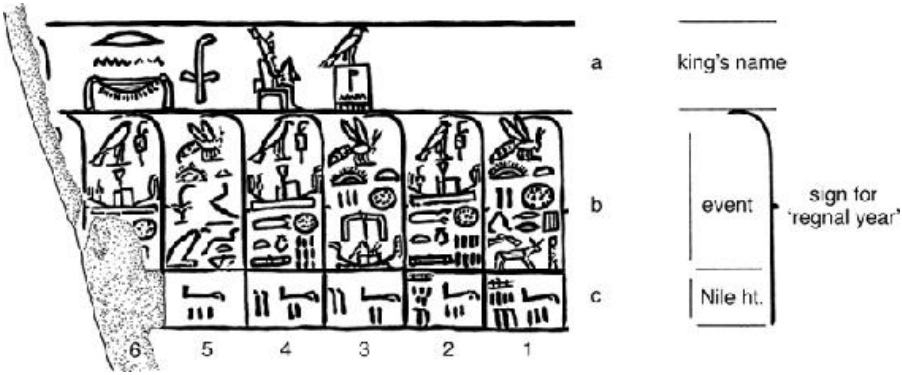


*Figure 2.2*An extract from the Palermo Stone recording events in six years of King Nynetjer of the Second Dynasty (the extract begins with his fifteenth year). His name is written in line 'a'. The compartments in lines 'b' and 'c' are divided by vertical lines, curved at the top and with a small projection to the right placed halfway down. Each of these lines is in fact the hieroglyph used to write the word for 'year' (see also Figure 2.22 (F), p. 103). Row 'b' summarizes in hieroglyphs the main events of the years: (1) Appearance of the king; second running of the Apis bull. (2) Processional tour of Horus (i.e. the king); eighth time of the enumeration. (3) Appearance of the king; third time of the Festival of Seker. (4) Processional tour of Horus; ninth time of the enumeration. (5) Appearance of the king; offering to (?) the goddess Nekhbet; the Djet-festival. (6) Processional tour of Horus; tenth time [of the enumeration]. The biennial rhythm of the king's official life, built around an enumeration of the country's wealth every second year (probably an early kind of Domesday record), is striking. The lowest row of compartments (c) contains an exact measurement of the height of the Nile flood: (1) 3 cubits, 4 hands, 3 fingers (1.92 metres); (2) 3 cubits, 5 hands, 2 fingers (1.98 metres); (3) 2 cubits, 2 fingers (1.20 metres); (4) 2 cubits, 2 fingers (1.20 metres); (5) 3 cubits (1.57 metres); (6) destroyed. The variation in height, in this five-year span amounting to 0.78 metres, would affect crop yields in higher-lying fields. See Wilkinson, *Annals*, 126–8.

Administration and the honouring of royal ancestors do not provide a complete explanation for this interest in the past, however. The records at their disposal enabled the Egyptians to measure past time, and offered them the prospect of a journey in the imagination to the point where time met the cosmos. The most vivid expression of this is found in another king list, again from the New Kingdom, but this time written on papyrus and now in the Turin Museum.[5] Originally it listed around 300 names of kings, and the aim of its compiler was to be complete. No king seems to have been too minor or short-reigned for inclusion. The Palestinian kings who formed the Hyksos Dynasty (*c.* 1650–1535 BC) were included, even though they did not merit having their names written in cartouches. This, in fact, was a remarkable concession to reality: tacitly admitting a break in the succession of

legitimate kings just for the purpose of attaining completeness. Against each king in the Turin list was written the precise length of his reign, sometimes to the exact day. At certain points a summary of numbers of kings and total length of reigns was inserted. Thus at the end of what we call the Eighth Dynasty, a summary of 958 years from the reign of King Menes (the first name of the lists) was provided.

If this was all the Turin king list did, it could be classed as an elaborate administrative device. The compiler of the list attempted, however, to continue back in time beyond the reign of Menes. It is here that the modern and the ancient mind part company. Before history we place prehistory: the record of human society in a world without writing, an anonymous place where names and deeds are unknown. Such a state of affairs was inconceivable to the ancient Egyptians. But this did not prevent curiosity about what had gone before the first recorded king. The Turin list devoted more than one column of its text to this. Immediately before Menes came several lines which summarize the collective reigns of 'spirits' (or 'devotees'), not given individual names, and before these, and heading the whole compilation, a list of gods (including Seth and probably ending with the goddess Maat). The name of each is written in a cartouche, as if a king, and followed by a precise length of reign. In the case of the god Thoth, for example, this is 7,726 years.[6]

From the whole Turin list one could trace in direct line the royal succession from a period when the gods had ruled as kings, and from the completeness of the data gain the added satisfaction of calculating the entire length of the period involved. Because the papyrus is fragmentary (including the loss of the top half of the first column) we can no longer do this but it is clear that the reigns of kings were only a relatively short and 'recent' era before which stretched an era of gods and spirits which had lasted for many times longer. On consulting the papyrus, the ancient scribe could have known that this was the age of the world since the time of the first creator god, and he would have seen how the kings of the past and their great monuments fitted within this majestic scheme. It was a scheme that allowed for only a single line of kings, however, each one handing the throne to his successor. We know, from critical evaluation of a wide range of evidence, that there were actually periods of disunity, when rival dynasties of kings ruled particular parts of Egypt at the same time (principally the First and Second Intermediate Periods). But the Turin compiler literally straightened out the record, placing dynasties that had overlapped into a single sequence, one after the other.

This is the Egyptians' 'official' version of their history. But the sources we have do not actually present a uniformly respectful view. Knowledge of the gods co-existed with scepticism, an aspect of perversity. The relative strength of each varies with the individual, and both, to some extent, are present within the same individual. Thus some Egyptians, at least, could contemplate the gods with a degree of detachment, even humour. It is a mistake to think that they necessarily believed in gods with childlike credulity. Although shrines or tracts of sacred ground could be protected against acts that defiled them, and transgressors could face harsh punishments, disbelief and even mockery of the gods did not necessarily have the same consequences. There was no crime of blasphemy. Knowledge of the gods was, at least when in a certain frame of mind, a relatively neutral experience. It was thus acceptable to write a story in which the goddess Isis ('a clever woman. Her heart was craftier than a million men') schemes to discover the secret name of the sun god Ra, depicted as an old man who, having succumbed to the pain of a snake bite, reveals his hidden name to her.[7] The text is complete and its purpose is clear. It provides 'historical' authority for using the story itself as a cure for scorpion sting. Another story, written with fine, clear calligraphy and part of a private library that also contained a manual of temple service and spells to cure ills that sought the help of gods, narrates the quarrel between the gods Horus and Seth. The violent episodes of their confrontation formed one of the cornerstones of the myth of the state. It took the optimistic view that the forces of good and evil, of order and chaos, of truth and falsehood, as symbolized by these two beings (Horus and Seth) who were also embodied in kingship, were not in the end symmetrically balanced. Horus, and what he stood for, would ultimately triumph. But this particular papyrus presents it as a comic tale, in which the gods – amongst them Isis and Osiris – are quarrelsome, vulgar and open to ridicule.[8]

And so it was with kings also. A few reigns acquired a certain 'flavour'. Sneferu of the Fourth Dynasty, for example, was later regarded as the archetypal good king from the distant past, his wholesomeness expressed in one tale (in Papyrus Westcar) by his delight in being rowed on a lake by a crew of near-naked virgins.[9] Rameses II was a more austere model for his successors. 'You shall double for me the long duration, the great kingship of King Rameses II, the great god,' prayed Rameses IV some 60 years later (the prayer

failed: he died in his seventh regnal year).[10] Khufu (Cheops), builder of the Great Pyramid (dying *c*. 2447 BC), on the other hand, acquired a reputation for cruelty and arrogance, which appears in a collection of stories about the deeds of magicians (Papyrus Westcar again) apparently written in the late Middle Kingdom (*c*. 1750 BC). It reappears in Manetho's History (compiled in the first half of the third century BC) and in the narrative of Herodotus of two centuries earlier.[11] Whether this was a true reflection of Khufu's character, or an imagined consequence of having been the builder of the largest of all the pyramids, is something we can no longer tell. Papyrus Westcar provides this unflattering picture as a prelude to introducing the ultra-pious kings of the succeeding Fifth Dynasty, the point evidently being that by arrogant and offensive behaviour Khufu brought doom to his house. The reigns of other kings from the distant past who were thought not to have maintained the standards of kingship that the Egyptians regarded as proper were likewise made the settings for didactic discourses. King Pepi II (*c*. 2212–2118 BC), almost the last king of the Sixth Dynasty, was one: he is apparently credited with homosexuality in a fragmentary later tale in which an affronted citizen is thwarted from speaking out in public.[12] A king with unsavoury reputation probably provided the setting, now lost, for the lengthy set of lamentations on disorder composed by a Middle Kingdom scribe named Ipuwer.[13] Akhenaten (*c*. 1360–1343 BC), who ostentatiously deviated from kingly traditions, was subsequently referred to as 'the enemy of Akhetaten', a reference to his new city (see Chapter 8).

Some contexts demanded solemnity, and these were primarily ceremonies of kingship and performances within or around temples and shrines that attracted stylized and sometimes monumental commemoration through carved and painted scenes and hieroglyphic texts. In other contexts, away from this level of solemnity and involving material often committed to papyri, we see Egyptians distancing themselves from aspects of their own culture, especially those pertaining to gods and to kings. Systems of authoritatively stated belief need channels for release and are not necessarily damaged thereby. In the case of kings, people were able to discriminate between the office of kingship with its prescribed code of formal behaviour and the all-too-human temporary holder of the office. Instinct for survival told most people how far to go and when to stop. The reputations of Khufu and Pepi II did not exclude them from the formal king lists (though Akhenaten's did), nor were the

images of the gods Horus and Osiris made any less majestic by their prototypes being made the subject of mirth. Moreover, this limited 'licence' or intellectual freedom created settings in which the lessons of bad kingship could be expounded. The acknowledgement that periods of disorder and injustice had actually happened served as a warning, and gave credence to the role of the king as maintainer of order and justice.

Fear of political disorder

There was, however, a limit, perhaps self-imposed through innate respect for what kings stood for or perhaps derived from a blindness to perceiving that the affairs of the state can be presented as a narrative on a larger scale than that of simple story-telling built around a few characters. We know, from modern researches, of a period of internal unrest culminating in civil war between two contemporaneous ruling families, the Ninth and Eleventh Dynasties, of Herakleopolis and Thebes respectively. This was the First Intermediate Period (*c*. 2117–2040 BC). Later Egyptians treated it circumspectly. The founder of the principal breakaway group, King Khety of the Ninth Dynasty, later became, like Khufu, the object of unfavourable anecdote, preserved in the copies of Manetho. The entry for this king, in fact, summarizes neatly the anecdotal, moralistic view of history: 'King Achthoes (the Greek form of Khety), behaving more cruelly than his predecessors, wrought woes for the people of all Egypt, but afterwards he was smitten with madness, and was killed by a crocodile.'[14] There is no hint here of the political opportunism which must have given Khety and his family temporary control of the Egyptian throne, soon disputed by a rival dynasty based at Thebes (the Eleventh).

No later text that we know of used the setting of provincial breakaway or warring dynasties directly. In the immediately ensuing period (the Middle Kingdom) thoughtful men composed literary texts which dwelt on the nature of a disorderly society, but within them they kept recent historical reality at a distance. The First Intermediate Period was not used directly to point to a moral. One device put the description of disorder into a prophecy uttered by a priest (named Neferty) at the court of the long-dead but highly regarded King Sneferu, of the early Fourth Dynasty.[15]

All happiness has vanished;

The land is ruined, its fate decreed,
Deprived of produce, lacking in crops.
What was made has been unmade.

The disorders of this unspecified future time are terminated by the saviour-like arrival of a King Ameny, whose historical model was probably Amenemhat I, first king of the Twelfth Dynasty (*c*. 1994–1964 BC). The lamentations of the scribe Ipuwer, mentioned above, were another product of the same mood, but their dramatic pictures of social upheaval likewise lack historical names and events.

By the time of the New Kingdom a second period of internal disorder had occurred, again culminating in a civil war: the Hyksos Period (see the previous chapter, pp. 42–3). But here the circumstances were very different. The Hyksos were Palestinian kings who had taken over the delta. Since this was a period of rule by foreign kings eventually ejected by military force from Egypt it was legitimate to see it as an unfortunate aberration from the ideal picture of the past. Even the Turin list accepted this. The Hyksos kings appear, but shorn of royal titulary and cartouches, and labelled instead with a hieroglyphic sign which categorized them as foreigners. In one temple text, Queen Hatshepsut (*c*. 1472–1457 BC), herself a successful usurper of the early Eighteenth Dynasty, used the Hyksos Period as the scenario of disorder from which she had saved Egypt, ignoring the half-century of peaceful and prosperous rule of her Eighteenth Dynasty predecessors.[16] Here the theme of royal responsibility for deliverance from chaos was used with a vengeance. It was permissible in a formal text because the Hyksos Period could be explained away, unlike the First Intermediate Period.

Departures from the picture of the ideal past were few, and (the Hyksos Period excepted) confined to individual rulers. More typically the past was the fount of authority and authenticity. A characteristic image is provided by King Neferhetep of the Thirteenth Dynasty (*c*. 1740 BC), studiously visiting 'the houses of writings', examining the 'ancient writings of (the creator god) Atum' in order to discover the correct form for a new statue of Osiris, laid down by the gods themselves at the beginning of time.[17] With a similar reverence for ancient forms Egyptian artists retained the original shapes of hieroglyphs with scarcely any modification for three thousand years. The general continuity of style in art and architecture owes itself to the careful reproduction of codified styles created in the Early Dynastic Period and Old Kingdom. But there was an element of self-

deception in this. Changes of ideals and forms did occur, and these must reflect intellectual development, something directly apparent from written sources also. The modern scholarly apparatus of art history in Egyptology is based upon the premise that style did change from period to period and can be rationally analysed. Thus the brooding, careworn images of kings in Middle Kingdom statuary conveyed a very different message from their idealized youthful counterparts of the Old Kingdom. King Neferhetep's new statue of Osiris would have been recognizably a product of the craftsmanship of its time. Indeed, the 'writings' that the king examined can have specified the nature of the ancient image in only general terms, particularly the precious materials of which it was composed. The Egyptians could not have put into the words of their language a description of the style of a statue in the way that we can do now. The same was true of architecture. The New Kingdom saw a major reappraisal of temple architecture in which, at least as it relates to the royal mortuary cult, we must recognize significant shifts in meaning. Change did occur, but on the whole tastefully and reverently through retention of the basic vocabulary of traditional forms, sometimes reinforced by appeals to the past. More will be said on this theme later in this chapter.

On occasions the exploitation of the past could be quite elaborate. In the next section of this chapter an extract from an important mythological text will be quoted, known as the Shabaka Stone.[18] In its preamble King Shabaka of the Twenty-fifth Dynasty (*c*. 721–707 BC) claims to have copied the text from an ancient worm-eaten document, and it is, indeed, written in a very archaic style. For a long time scholars accepted Shabaka's claim at its face value, and set the original composition of the text as far back as the Third Dynasty. It has now become generally accepted that, although the themes of the myth belong to the mainstream of Egyptian thought, this particular composition is relatively late, perhaps even of Shabaka's time. As for its archaic style, there is good evidence to show that in the Late Period scribes had a working knowledge of an archaic form of the language, and could compose in it. An appeal to antiquity, and sometimes a cloaking in antique forms, made new ideas or new interpretations of old ideas, more acceptable. The past was a cultural womb.

The Egyptian myth of the state

The kings of the lists shared one title in common: all were Kings of Upper and Lower Egypt, the two archetypal geopolitical divisions of valley and delta. In this title lay a powerful expression of unity. Again, however, we find the Egyptians shying away from the unpleasant realities of politics. Order versus chaos is a theme that occurs in various guises in Egyptian thought. It was a theme of kingship. Several of the reflective texts of the Middle Kingdom mentioned above (including the lamentations of the scribe Ipuwer) dwell on the nature of a disordered world, making the king responsible for its cure, but these, as noted above, belong to a style of limited free speculation amongst the scribal class. At the level of formal ideology division and disunity were seen not in terms of potential fragmentation into multiple territories, or into the topsy-turvy chaos of the lamentations of Ipuwer. That would have given too much weight to a disturbing possibility. Instead a symbolic dualistic division was proposed. This appealed to the Egyptian love of symmetry, as reflected throughout their art and architecture. Moreover, the idea of two originally separate kingdoms, of north and south, provided a basis for the king's unique unifying role that was safer and more respectable than a greater number of lesser units, or a wider condition of anarchy. It also matched the general geographical division of the country into two halves, although real political history shows up internal divisions along different lines.

The elaboration of this aspect of kingship was as much pictorial as written. The Egyptians excelled in strong and direct visual symbolism. In this they were helped by the nature of hieroglyphic writing. Most hieroglyphic signs stood for groups of consonants, so that pictures of things could be used to write other words that had the same sequence of consonants even if pronounced differently. It is as if, in modern English, we chose the picture of a leaf to write all words with the sequence of consonants *l* and *f*: thus, *leaf*, *life*, *loaf*, *laugh* and a*loof*. (Context and additional signs when necessary prevented ambiguity.) This dissociation between sign and meaning was boldly exploited by artists. And it remained a characteristic of the writing system that, although at an early date a cursive form of writing (hieratic) was developed, for use with pen, ink and papyrus, in formal contexts artists lovingly retained all the detail and natural form of the originals so that the roots were never lost. Artists could thus take hieroglyphic signs standing for abstract concepts and work them as tangible objects into artistic compositions whilst retaining congruity of style. This emblematic use of hieroglyphs contributed a visual element to a form

of language-game by which significant concepts could be handled. It is an important characteristic of the Egyptian art style, as is the restraint with which it was exploited. In any one composition only a very few signs would be treated in this way, giving a clear and immediate message.

A good set of examples which summarizes the basic ideology of the Egyptian state is carved in low relief on the sides of ten limestone statues of King Senusret I of the early Twelfth Dynasty (*c*. 1974–1929 BC) from his mortuary temple at El-Lisht (Figure 2.3). Down the centre runs a segmented vertical sign that is actually a stylized picture of a windpipe and lungs, but which was used to write not only the word for 'lungs' but also the verb 'to unite', which possessed the same sequence of consonants: *s*, *m*, and a strongly aspirated *a*. The word and its hieroglyph were the key components whenever the theme of the unification of the kingdom was presented (other examples are Figures 2.18 (4) and 8.8 (a4), pp. 95 and 338). On top of this emblematic sign for 'unity' rests the oval cartouche containing one of the names of the king. Around the sign two plants are being tied in a reef-knot: on the left a clump of papyrus stalks, the heraldic plant of Lower Egypt; on the right, a clump of reeds, similarly characteristic of Upper Egypt. The act of tying is being performed by two gods: on the left the hawk-headed Horus, and on the right Seth, whose animal was a mythological but largely canine creature. The hieroglyphs above each god refer to two localities. Seth is 'The Ombite', that is, from the city of Ombos (Nubt, near the modern village of Nagada) in Upper Egypt. Horus is 'Lord of Mesen', a town name used for places in both Upper and Lower Egypt (for reasons explained shortly), but here meaning one in Lower Egypt. On some of the other throne bases Seth is called 'Lord of Su', a place lying just within the northern border of Upper Egypt, whilst Horus is several times called 'The Behdetite', that is, the one from Behdet, another name used for more than one place, but here clearly referring to somewhere in the north.

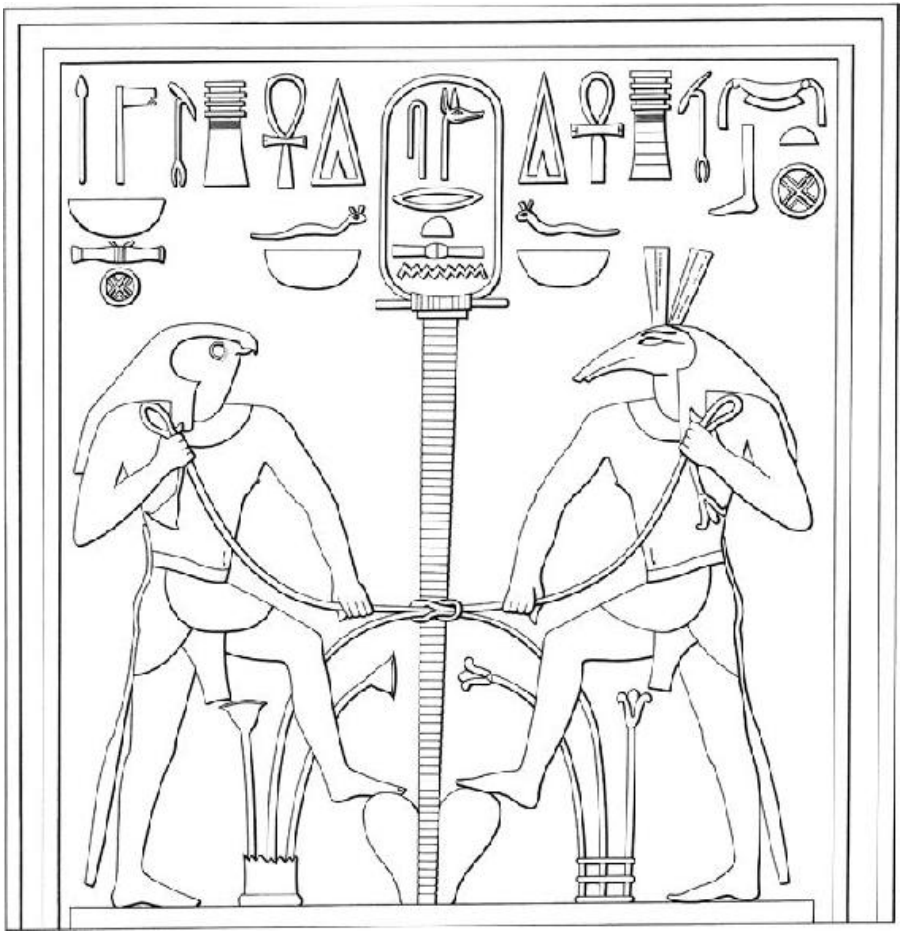


*Figure 2.3*The source of political order and stability: the reconciliation of conflicting powers epitomized by the gods Horus (*left*) and Seth (*right*), in whose reconciliation are subsumed the political divisions of Egypt (see also Figure 2.19, p. 96). The reconciliation is symbolized by the tying together of the heraldic plants of Upper and Lower Egypt around the hieroglyphic sign for 'unification'. Throne base of Senusret I (1974–1929 BC) from his pyramid temple at El-Lisht. After J.-E. Gautier and G. Jéquier, *Mémoire sur les fouilles de Licht*, Cairo, IFAO, 1902, 36, Fig. 35 (redrawn by B. Garfi).

The artists who carved these statue bases were masters of elegant variation. Other dualistic themes were also woven into the same basic design. On five of the bases Horus and Seth were replaced by figures of plump Nile gods identified by symbols as Upper and Lower Egypt, whilst the hieroglyphic captions at the top refer to the 'Greater' and 'Lesser Ennead' (Company of Nine Gods), 'offerings' and ideas of fertility using paired synonyms in both cases. There is also another variation of the Horus–Seth theme. In this case the pairing is between, on the one side, 'The united portion of the two lords', with a little

picture of Horus and Seth to identify who the two lords were, and on the other, 'The thrones of Geb', an earth god who, in longer texts on the same theme, presided over the reconciliation of Horus and Seth. Here the dualism is being extended beyond the pairing of the two contrasting gods to the pairing of one term for both and a reference to the ultimate agreement between them under the authority of an arbiter, Geb.

Within this rearrangement of entities to illustrate the concept of harmony through the balancing of pairs we can glimpse a simple example of one form of the Egyptians' thought processes: the manipulation of words, especially names, as if they were discrete units of knowledge (which in a way they were). Ancient knowledge, when not of a practical nature (of the kind: how to build a pyramid and how to behave at mealtime), was essentially the accumulation of names of things, beings and places, together with their associations. 'Research' lay in extending the range of associations within the imagination. Meaning or significance was left there and remained largely unformulated. Mythological scenes such as those on the throne bases from El-Lisht provided a kind of cross-tabulation of concepts.

The esteem in which names of things were held is illustrated by a class of text referred to using a later Greek term 'onomastica' (singular, 'onomasticon').[19] The best known, compiled in the late New Kingdom (*c*. 1100 BC) by a 'scribe of sacred books' named Amenemope, and much copied in ancient schools, has the promising heading: 'Beginning of the teaching for clearing the mind, for the instruction of the ignorant, and for learning all things that exist.' But without a single word of commentary or explanation it runs on as a list of names of things: the elements of the universe, types of human beings and their professions, the towns and villages of Egypt in great detail, parts of an ox and so on. This form of learning, without explanation, at first sight looks dull. But to the people of the time, knowing the name of a thing made it familiar and brought greater confidence (power) in using it. We can, in fact, still recognize some validity in this: the study of the natural world, whether bird watching or classifying plants, begins with knowing names, and with arranging the names in groups (the science of taxonomy), just as was done intuitively in the onomastica, which served as memory aids for the range of knowledge which was absorbed simply as a result of being a reasonably well-educated Egyptian.

This view of names led to a prominent characteristic of that branch of knowledge that embraced the gods (whose names were not

included in the lists of the onomastica). Their names became the building blocks for expanded definitions of divinity which at the same time directed the attention towards an underlying unity. Thus the Apis bull of Saqqara could be addressed as 'Osiris-Apis-Atum-Horus in one, the Great God',[20] and more simply the Egyptians of the New Kingdom defined the power that presided over Egypt (and beyond) as the god Amun-Ra, a fusion of a 'hidden' god (the meaning of the name Amun), particularly associated with the city of Thebes, with the sun god Ra. The sun god himself had other links or extensions: 'I am Khepri in the morning, Ra at mid-day, Atum in the evening.'[21] Fascination with the 'names of god' produced Chapter 142 of the Book of the Dead, which carries the heading 'Knowing the Names of Osiris in his every seat where he wishes to be', and which is an extensive list of geographically local versions of Osiris, as well as of versions of several other divinities finally summarized as 'the gods and goddesses in the sky in all their names'.[22] An appreciation of the Egyptian mode of thinking is essential to the correct evaluation of texts which may seem to have a more direct bearing on the real, material world; such texts can become sources for history. Place names were just as open to manipulation, giving rise to a form of symbolic geography. It created in the mind an idealized and sometimes geographically symmetrical layout of places, with their identity residing in their names and mythological associations.

Often, perhaps always, there was something there on the ground, a huddled mud-brick town or a nondescript little locality. But although symbolic geography articulated a myth of territorial supremacy on the part of the state, it is a mistake to take the geographical references in such sources as guides to ancient real geography. To do so is to miss the abstracting powers of the Egyptian mind which created an ordered and harmonious myth-world from common and often probably rather humble experience. The result was full of familiar names yet belonged to a higher plane. It hovered tantalizingly between reality and abstraction.

It also, however, sets a trap for the unwary. Modern scholarship inclines towards the approach of lawyers: documented facts are assembled, they are discussed point by point, and a verdict is reached which satisfies modern logic and the 'weight of the evidence'. But ancient texts and scenes reflect their own mental architecture. They were composed from within the minds of their creators, and reflected an inner world which was not a straightforward projection of the material world, the world which, for example, archaeology uncovers.

Symbolic geography was a product of an imaginative people. We should not think of using it as a straightforward basis for historical reconstruction.

We are now in a better position to pursue the imagery on the throne bases of Senusret I. A written version of the underlying myth occurs as part of the Memphite Theology, or Shabaka Stone, mentioned earlier. Outwardly it has narrative form:

> [Geb, lord of the gods, commanded] that the Ennead (company of nine gods) gather to him. He judged between Horus and Seth; he ended their quarrel. He made Seth king of Upper Egypt in the land of Upper Egypt, as far as the place where he was born, which is Su. And Geb made Horus king of Lower Egypt in the land of Lower Egypt, as far as the place where his father (Osiris) was drowned, which is 'Division of the Two Lands' (a mythical place name although an Egyptian would probably instinctively think of Memphis). Thus Horus stood over one region, and Seth stood over one region. They made peace over the Two Lands at Ayan. That was the division of the Two Lands … Then it seemed wrong to Geb that the portion of Horus was like the portion of Seth. So Geb gave to Horus his (i.e. Seth's) inheritance, for he is the son of his firstborn son. Geb's words to the Ennead: 'I have appointed Horus, the firstborn' … He is Horus who arose as King of Upper and Lower Egypt, who united the Two Lands in the Nome of the Wall (i.e. Memphis), the place in which the Two Lands were united. Reed and papyrus were placed on the double door of the House of Ptah (the temple of Ptah at Memphis). That means Horus and Seth, pacified and united. They fraternized so as to cease quarrelling in whatever place they might be, being united in the House of Ptah, the 'Balance of the Two Lands' in which Upper and Lower Egypt had been weighed.[23]

On the El-Lisht thrones Horus and Seth are representatives of Upper and Lower Egypt of equal status. On the Shabaka Stone Seth's place is diminished. From an initial equality with Horus he is subsequently disinherited, though acquiescing in his new subordinate role. An archetypal tension has been created which each king must resolve by ensuring once again the triumph of the sense of legitimacy and orderly rule that Horus stood for. This text (together with a mass of further ancient allusions on the same theme, which can be found spread over a good part of Pharaonic history) poses a fundamental question. Does

the myth reflect a formative historical phase in the history of the Egyptian state? Or was it invented to provide a philosophical basis for the Egyptian state which had, in fact, developed along a different historical path?

Earlier generations of scholars (well into the twentieth century) were frequently attracted to the first of these hypotheses, that the myth somehow reflected a formative historical phase. Before the First Dynasty they saw two kingdoms, each with a 'national god': Lower Egypt under Horus, Upper Egypt under Seth. A turning point had come when Lower Egypt defeated the south and established a unified kingship, even though this may have been short-lived in view of other evidence which suggested that the First Dynasty began with unification imposed from the south. That there is an alternative explanation owes much to archaeology. Indeed, the synthesis of sources, of archaeology with ancient myth, provides a case history of how ideology is created.

The formation of the state: a model for early Egypt

There is no defining size for states. They can be based on a city and its immediate territory (as in the cases of classical Athens and Venice in the Middle Ages and after) or can be continental in extent (the Ottoman Empire, for example). Nor is there anything mysterious about the processes involved in the emergence of states, a subject which has been much debated. The history of the final episodes of several examples that developed relatively late is known from contemporary written sources of the seventeenth to nineteenth centuries AD, in Africa, Central Asia and the Pacific islands. Violence is a central theme.[24] Since 2014 we have been able to witness the process for ourselves (through news reports) as it has unfolded in Syria and northern Iraq, and with a still uncertain outcome.

What is much harder to ascertain is how or why the process began in the first place, given the long period during which human groups remained small and marked by practices which ensured that dominant leadership did not develop (to judge from the evidence of those – hunter-gatherer or forager groups – that survived into modern times). Why should an equilibrium which allowed humans to maintain themselves as a viable species gradually break down and give way to something more complex and prone to turmoil?

The answer almost certainly lies in the nature of human cognition,

an evolutionary development, which has the power to create ever-greater complexity through self-reinforcement. A received set of ideas or behaviours becomes a baseline for further subdivisions which are, in turn, further subdivided in an indefinite progression. The process engenders its own acceleration, which is so obvious a feature of modern life. But in the beginning, for thousands of years, it proceeded at an almost unnoticeably slow pace. Few of the ideas and behaviours of Palaeolithic communities are preserved in the archaeological record. But there is still sufficient evidence, including in the slow refinement of stone tool technology, to imply that human cognition was not static even then (though this still does not answer the question 'why?' to which there currently appears to be no answer other than through random mutation).

The acceleration of complexity in human awareness and understanding also proceeded unevenly from one society to another. In the eastern Mediterranean and Near East, at least as early as the ninth millennium BC, it had come to embrace critical consideration of plants and animals and a degree of experimentation which brought the beginnings of agriculture. Some of the elements of slowly increasing complexity will also have been social and behavioural. They led, in this same area, to collective action to express transcendental ideas in the form of large-scale sculpture (most notably at the site of Göbekli Tepe in Anatolia) also in the ninth millennium BC. It led to villages, even towns (most notably Çatalhöyük in the same area).[25]

Proposing a series of steps can make the process seem logical, even inevitable, with the resulting patterns of life fitted for their purpose. But across the world the process did not follow the same course. The starkest contrast is provided by some groups, certain of the hunter-gatherers, who seemingly thwarted the processes of change and maintained a small-scale form of equilibrium more or less down to this day. It is, in a way, more difficult to explain this than to explain the runaway trajectory of development towards the complex forms of society, including the state, which has eventually swept up most of humanity. The northern Nile valley followed a course of development towards settlement and complexity which seems to have had much in common with what had begun much earlier in the eastern Mediterranean and Near East but may not have been quite the same. The move towards permanent settlement and a 'Neolithic' way of life did not commence until considerably later (seemingly towards the end of the fourth millennium BC) and then proceeded faster, suggesting

that, 'despite their geographical proximity, prehistoric societies in Africa and Asia followed very different trajectories to political centralization'.[26]

Two related aspects of Egypt can be picked up in the record of the early dynasties which might have given the local process of state formation a distinctive character. One was the prominence of local families – one might call them clans – whose male heads commanded the resources to build tombs which were the largest constructions in their area. These tombs accommodated cults of their human owners which, for a long time, seem to have drawn in more resources than were expended on the shrines of gods. The recognition that heads of families possessed something of the aura of divinity remained for a long time a feature of ancient Egypt. The other was that these cults were in turn supported by landed estates (or domains). The ownership of agricultural land and other means of production by leading patriarchal families lay at the heart of provincial life and became embedded in the symbolic geography of the country. Kings, as heads of the most important family of all, came in time to dominate the process, and domains remained an ineradicable institutional core to ancient Egypt.[27]

The prominence of land, especially as organized into domains, in the symbolism of Egypt in the early historic periods and the equal prominence of local families who evidently controlled it must reflect a long prior development in the Predynastic Period. Permanent occupation and working of the same tract of land triggered, through a powerful psychological process, a sense of territorial rights which came to be expressed in transcendental, symbolic terms which in turn created a peculiar sense of self-confidence within the communities concerned. It fostered in some a competitive urge, as they saw the possibility of obtaining an agricultural surplus for a more satisfactory life not through extra agricultural work on their own part, but by purchasing it or coercing it from others. The combination of ambition and mystic sense of identity put individuals and communities into potential competition with one another, to a greater extent than had happened before.

The course that this competition took in a landscape of almost unlimited agricultural potential, of the kind supplied by ancient Egypt, we can envisage through the analogy of game playing (Figures 2.4, 2.5 and 2.6 are to help the reader to envisage the background). We can begin simply by imagining a board game of the 'Monopoly' kind. At the start we have a number of players of roughly equal potential.

They compete (to some extent unconsciously) by exchanges of different commodities, and later more openly by conflict. The game proceeds by means of a combination of chances (e.g. environmental or locational factors) and personal decisions. The game unfolds slowly at first, in an egalitarian atmosphere and with the element of competition only latent, with the advantage swinging first to one player and then to another. But the initial equality amongst the players does not last indefinitely. An advantage that at the time may escape notice upsets the equilibrium enough to distort the whole subsequent progress of the game. As is the way with feedback into a system of interconnected units each of which has some degree of autonomy, it has a 'knock-on' effect out of all proportion to its original importance. A person on a winning streak finds that the advantageous position continues to reinforce itself. And so the game inexorably follows a trajectory towards a critical point where one player has accumulated sufficient assets to outweigh the threats posed by the other players and so that player becomes unstoppable. It becomes only a matter of time before that player wins by monopolizing the assets of all, although the inevitability of the win belongs only to a late stage in the game.

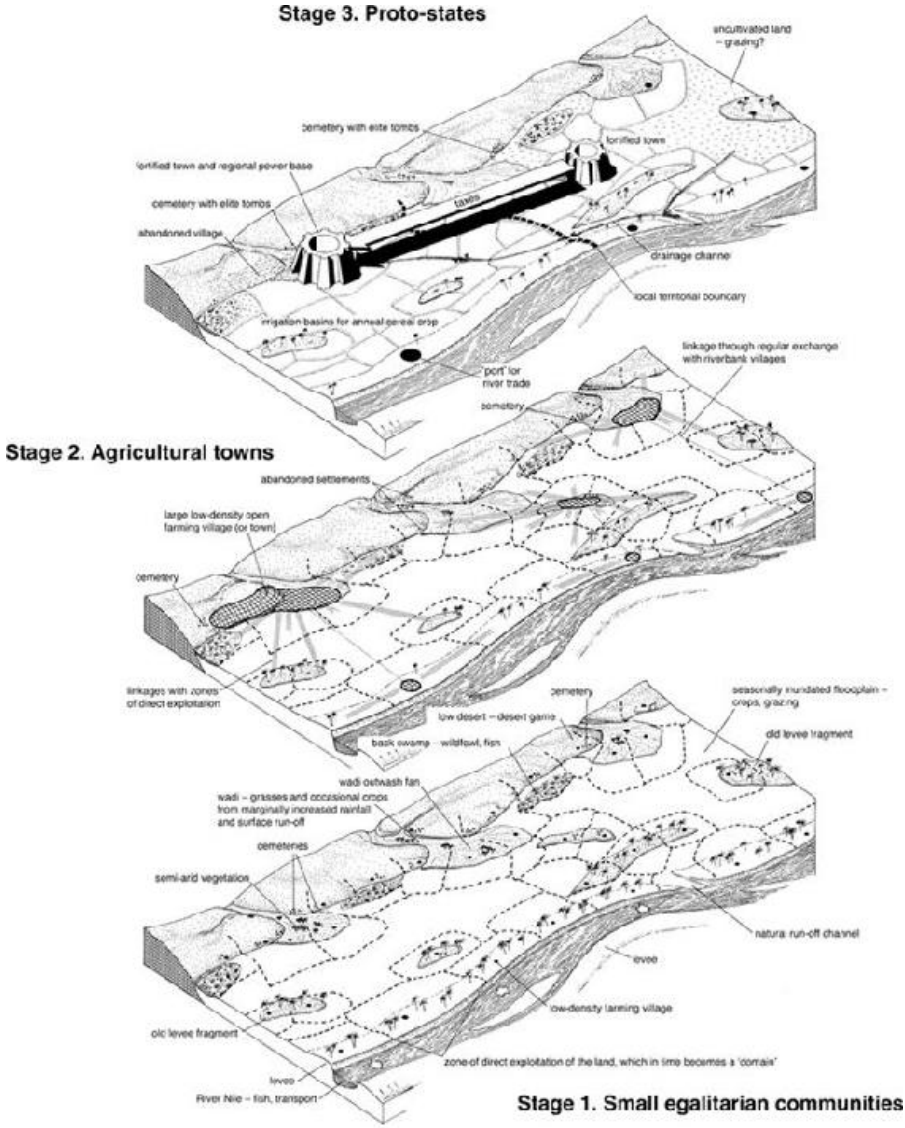


*Figure 2.4*Model landscape of Upper Egypt in the late Predynastic Period showing the likely environmental factors and local pattern of territorial and political expansion during the crucial phase of state formation.

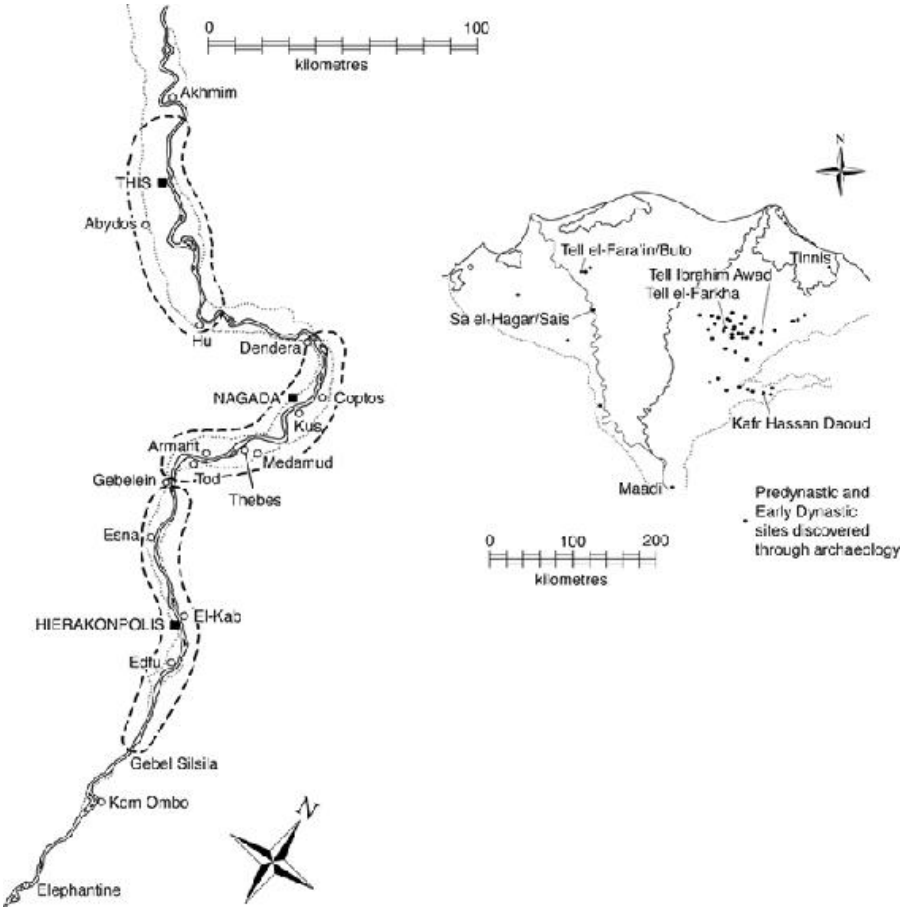


Figure 2.5Left. Hypothetical map of the most important proto-states of Upper Egypt as they developed in the late Predynastic Period (see also Figure 2.6, p. 74). *Right.* Map of the Nile delta, showing early sites located through archaeology. The uneven distribution reflects, to some extent, the varying intensity of archaeological survey. It is generally more difficult, even in later historical periods, to envisage territorial boundaries in the delta, and no suggestions are made here. After Y. Tristant and B. Midant-Reynes, 'The predynastic cultures of the Nile delta.' In Teeter, *Origins*, 45–54, p. 45, Fig. 5.1.

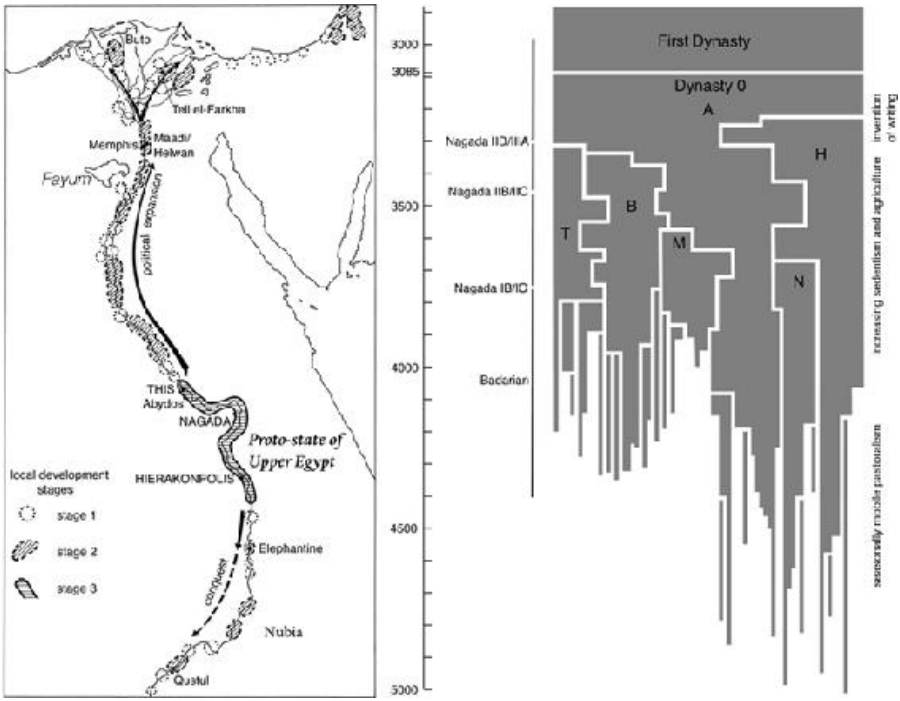


*Figure 2.6*State formation. *Left.* A simple linear view. The processes of centralization are at work throughout the area but at different rates, so that different stages of development (arbitrarily reduced to three) had been reached by the time that the politically most developed centre, a proto-kingdom of Upper Egypt based at Hierakonpolis (Figure 2.8, p. 77), embarked on a military expansion (marked by arrows) which engulfed the whole of Egypt. Early in the First Dynasty the expansion continued into Nubia. *Right.* A more likely process, of complicated but now unrecoverable micro-history involving an ebb and flow of success for individual places, 'jockeying for position' but not always through violence. In the diagram the boundaries are those of territorial area as a proportion of the total land available for control and are guessed. The letters N (Nagada), H (Hierakonpolis), T (Tell el-Farkha), B (Buto/Tell el-Fara'in), M (Maadi) and A (Abydos) are introduced to give the diagram some topicality. The considerable shortening of the predynastic timescale arises from re-assessments of radiocarbon dates, http://rspa.royalsocietypublishing.org/content/469/2159/20130395.

We can move closer to historical reality by imagining numerous games proceeding simultaneously, with winners promoted to join a progression of increasingly select games, where they dress in strange costumes and perform the acts of play with exaggerated formal gestures, the successful amongst them playing for ever higher stakes. We need also to correct the timescale, our view of who the 'players' really are. For the most part, so few significant changes of circumstance occur in any one real lifetime that each player is actually many generations treated as a unity. And in real life the games continue beyond the point of winning. Processes of decay and fission

set in (in ancient Egypt they were the Intermediate Periods) and the games go on with different outcomes likely.

The attraction of this analogy is that it sets up in our imaginations a simple system with feedback loops. It concentrates attention on the essence of a basic process at work in history and draws one away from the temptation to explain events through single causes and the careers of individual actors or agents. The heroes (or demonic villains) have their part to play but only if the circumstances are favourable. Human societies large and small are made up of individuals whose behaviour is not completely predictable. Yet the result is not wholly randomized 'background noise'. As with any complex adaptive system that allows a degree of free association and interaction of its constituent parts – the molecules of air in weather formations, for example – tiny variations can set up self-reinforcing consequences that grow in power out of all proportion to the starting conditions. Hurricanes suddenly appear. The process can also lead away from a level of integration already achieved. The rapid collapse of communist states in eastern Europe in the 1980s and 1990s and the equally rapid collapse of the market economy of the West in 1929 (and narrowly avoided in 2008) are striking modern examples of human social and economic systems running temporarily in reverse, towards dispersal of the energy that had previously gathered into centres of power.

Analogies have drawbacks. A misleading aspect of my imagined board game concerns the notion of rules. They stand for the limits which most people place on their behaviour and for the various restraints which systems impose. The study of history, however, including cases of recorded state formation, reveal that striking transformations often happen through the agency of unusually aggressive individuals who flout the rules, kill their rivals and seize everything. Charismatic yet ruthless leadership is, in a way, another 'chance' factor, but to make good progress it has to come at the right point in the game. The interaction between system and agent (the individual person) lies at the heart of much modern historical (and archaeological) study.

We can draw the inference, increasingly supported by archaeological findings, that all parts of Egypt where settled farming communities were early established should have advanced some way along the trajectory of play before its final and more theatrical stages, simply as a result of local internal processes. Everywhere villages, towns and agglomerations that were sometimes proto-states spread across the Nile valley and delta. There was thus a receptive

background to the last phase of political unification. The final expansion of the winning kingdom was into a social and economic landscape in which the processes of state formation were already under way, although at different rates, and destined to be arrested (for a time) through the victory of one of them. The entire process – more or less the span of the cultural phases of Nagada I to IIIA – seems, to judge from recent radiocarbon dates, to have been accomplished within six to seven centuries (*c*. 3750–3085 BC).[28]

Foundations of ideology (1): local tradition

It is very difficult to penetrate the minds and the dealings of people during the Predynastic Period, before writing had appeared. But archaeology gives us two signals to inform us when the process of state formation was in progress. One is the physical drawing together of communities into larger settlements that become towns (where local elites would be based). This is the process of urbanization, which increases the scope for interaction amongst individuals in whom the great change in outlook is gradually taking place, involving an expanding sense of imagined community and symbolic association with a defined tract of land. The other is the appearance of the rewards of successful competitive interaction in the form of evidence for conspicuous consumption and display, fuelled by trade in raw materials and finished products, sometimes bringing in material from far away (lapis lazuli from the area of modern Afghanistan being one). The familiar picture of inequality, of a society of haves, have-nots and many in between, has arrived. In Egypt this reveals itself in characteristics that would mark society for centuries to come: larger and more richly equipped tombs for a minority, mostly a ruling elite, and signs of an emerging ideology of power. Two sites in Upper Egypt, Nagada and Hierakonpolis, exemplify both aspects.

The modern village of Nagada, 26 km downstream from Luxor, on the west bank, has given its name to a site more properly known as Ombos (Nubt).[29] In Pharaonic times this was an important centre for the cult of Seth. Excavation and survey have revealed that a town had stood here from the Nagada II phase of predynastic culture (from *c*. 3500 BC, thus perhaps 400 years before the beginning of the First Dynasty), and that from the Eighteenth Dynasty or earlier it had possessed a small stone temple dedicated to Seth. The extent and importance of the town in historical times seem to have been far less

than during the Predynastic Period when it is, in fact, one of the largest known sites in the Nile valley (Figure 2.7). This applies both to the area covered by a deposit of predynastic settlement debris, which included part of a walled town (the South Town) built of brick, and to a series of cemeteries. One of them, cemetery T, small and lying on a ridge just behind the town, has the hallmarks of a rulers' cemetery. Some of the graves had been unusually large and well-furnished and, most unusually for the Predynastic Period, had been lined with sun-dried mud bricks. If we combine the archaeological picture of Nagada with the later position of Seth, we have a reasonably firm basis for claiming that at some time in the later Predynastic Period Nagada had been the capital of a small state.

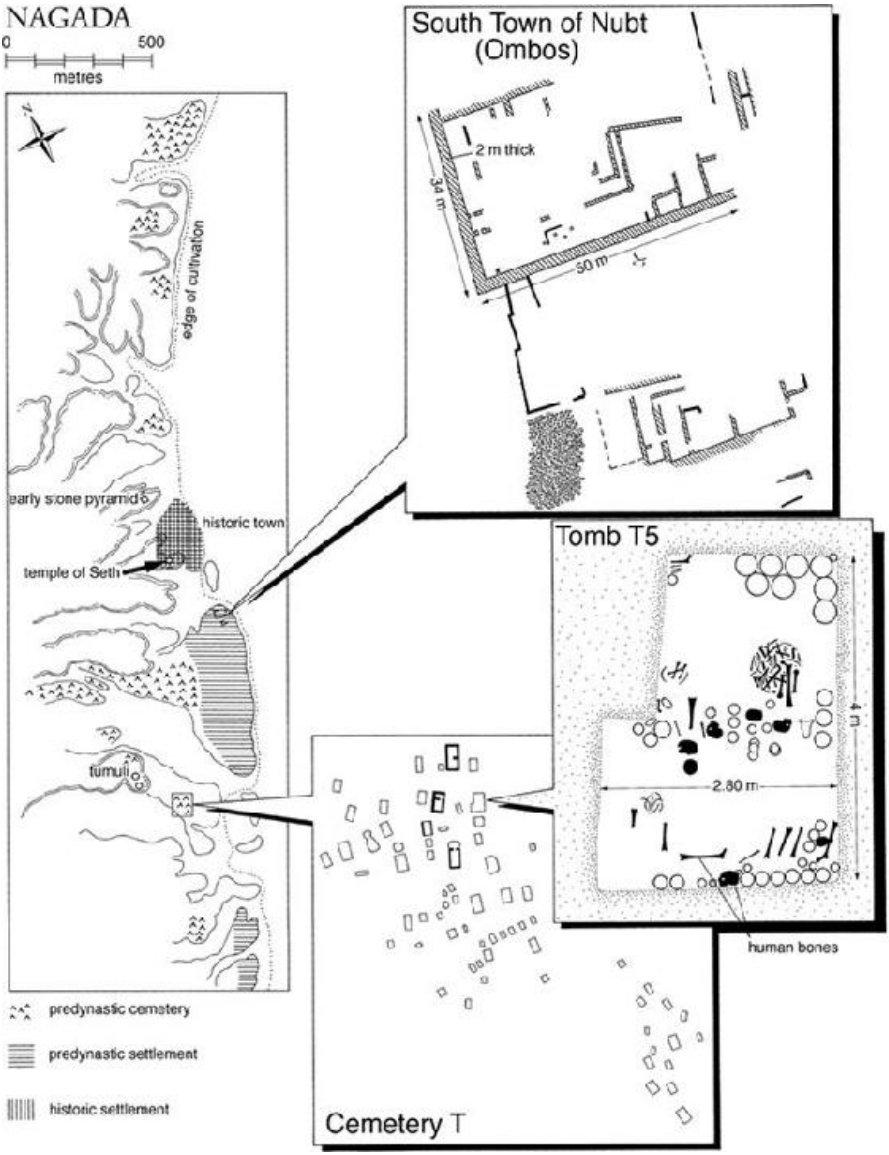


*Figure 2.7*Nagada: centre of one of the first proto-states in the Nile valley. Note the extent of the predynastic town, with its substantial mud-brick enclosure and other buildings at the northern end. The town of the historic period occupied much less space, but probably made up for this in increased density of occupation. The temple of Seth, however, remained a building of modest size throughout ancient times. The huge predynastic cemetery behind the predynastic town is the largest to have survived from this period. Cemetery T, although small, contained unusually well-constructed tombs for rich burials, probably those for a ruling house of Nagada. The basic map is after W. Kaiser, *MDAIK* 19 (1963), 16, Abb. 3 (see also Petrie and Quibell, *Naqada*, Pl. IA); the inset map of the South Town is after Petrie and Quibell, *Naqada*, Pl. LXXXV, and that of tomb T5, ibid., Pl. LXXXII; the inset map of cemetery T itself is after B.J. Kemp, *JEA* 59 (1973), 39, Fig. 1, itself after Petrie and Quibell, *Naqada*, Pl. LXXXVI.

The association between a major early archaeological site (Nagada) and the cult of one of the gods most closely associated with kingship (Seth) is encouragingly neat. The second site, Hierakonpolis, also contains the essence of a similar association, this time with Horus, but of a more complex kind. The site itself lies in the most southerly region of Upper Egypt (Figure 2.8).[30] Its importance is visible from two aspects of its archaeology. One is the sheer size of the spread of settlement debris of the Predynastic Period (at least 7 ha on the desert, and more now buried beneath modern fields). It includes an area of buildings (locality HK34) that had been protected by a palisade or wall of logs (over 50 m so far exposed) and a structure (locality HK29A) that might be the remains of a ceremonial area (see below, p. 90), not far from which was another stretch of wooden palisade (locality HK29B). The second aspect comprises unusually rich and well-constructed tombs. These were divided between at least two widely separated cemeteries: locality HK6 (see below, p. 90), and the other unnumbered and now lost to modern development. One tomb at the latter, no. 100, lined with mud brick and painted with a series of scenes, must have been the tomb of a late predynastic ruler.[31] Although in style the painting appears alien in comparison with the formalized art of the dynastic period, we can recognize at least two motifs which survived into historic times: the victor smiting bound enemies with an upraised mace (Figure 2.18 (2), (3), p. 95), and the ruler standing beneath a simple awning, reminiscent of later scenes of the king seated during the jubilee or *Sed*-festival (see below, pp. 103–4).

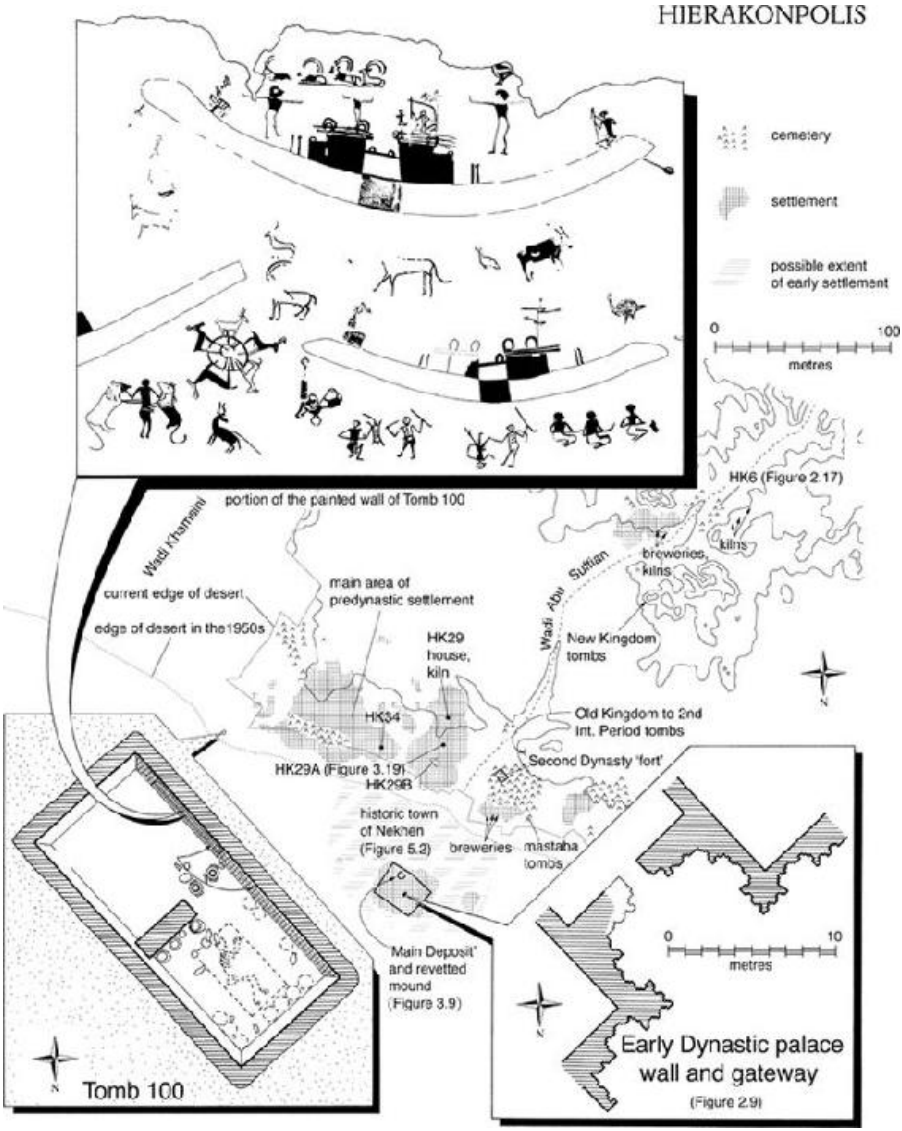


*Figure 2.8*Hierakonpolis: cradle of Egyptian kingship. The base map shows the areas of predynastic settlement together with the cemeteries on the low desert, and the possible continuation of settlement beneath the present floodplain, on an ancient wadi outwash fan now buried beneath alluvium. In the midst of the latter area stands the walled town of Hierakonpolis of the dynastic period (see also Figure 3.9, p. 130, and Figure 5.2, p. 198), which represents, as at Nagada, a smaller but much denser settlement than its predynastic predecessor. The map is after R. Friedman, 'The early royal cemetery at Hierakonpolis: an overview.' In F. Raffaele, M. Nuzzolo and I. Incordino, eds, *Recent Discussions and Latest Researches in Egyptology. Proceedings of the First Neapolitan Congress of Egyptology, Naples, June 18th–20th 2008*, Wiesbaden, Harrassowitz, 2010, 67–85, Fig. 1. The boundary between desert and fields as it was in the 1950s is taken from W. Kaiser, *MDAIK* 17 (1961), 6, Abb. 1. Early in the developmental sequence of kingship is tomb 100 (the 'Decorated Tomb'), probably the tomb of an early king of Hierakonpolis of the Nagada IIC

phase (*c*. 3400–3300 BC); at the other end is the fragment of Early Dynastic palace wall (*c*. 3000–2700 bc) and the huge mud brick 'fort' of the end of the Second Dynasty, both monuments of the aristocratic family which continued to occupy Hierakonpolis for several generations after the beginning of the First Dynasty. The Early Dynastic palace gateway and wall is a simplified version of Figure 2.9, p. 79. The 'Main Deposit' is a cache of objects of the late Predynastic/Early Dynastic Period and somewhat later, found beside the early temple enclosure of Horus. A detailed plan of the temple remains is given in Figure 3.9, p. 130. Amongst the material in the deposit were the Narmer Palette (Figure 2.10, p. 81) and Smaller Hierakonpolis (or Two-dog) Palette illustrated in Figure 2.15, p. 91.

In its general aspect Hierakonpolis resembles Nagada. Both sites also exhibit a pronounced shrinkage towards the end of the Predynastic Period (something visible at other sites of this time). This marks a fundamental change in the nature of settlement, bound up with the appearance of true urbanism in Egypt: the shift from sprawling low-density settlements to walled brick-built towns of higher population density. The city on the floodplain into which the low-density occupation of Hierakonpolis eventually coalesced has fared much better than Nagada. Destruction has been less intense, and much of the archaeological digging has been reasonably careful. One discovery has been a fragment of a sector of the Early Dynastic town, kept separate from the rest of the town by a distinctive, whitewashed enclosure wall marked at regular intervals with buttresses (Figure 2.9).[32] Part of the way along it was broken by a projecting gateway decorated with a more elaborate style of panels and niches that seems to have been a symbol of rule (the heraldic device known as a *serekh*, meaning something like an 'announcement', which was used as a frame around the king's Horus name, is derived from it, Figure 2.9, *inset*). It is an example of the way that architects sometimes use the scale and design of gateways to summarize the function and interior of the building as a whole. The gateway gave access to a maze-like settlement that seems to have surrounded a central space into which protruded a small brick platform, which could have been a throne dais, also with panelled sides provided with supports for wooden poles, perhaps for a canopy. The complex as a whole is a good candidate for being an early palace (for another, at Tell el-Fara'in, see Figure 2.13, p. 85), which turns out to have been a mud-brick compound, seemingly modest in the scale of its individual parts, and providing only limited separation between the huts of the king's followers and the needs of ceremonial. It was in these surroundings that the products of high craftsmanship that we so admire were made and used, and the power of the early state was wielded.

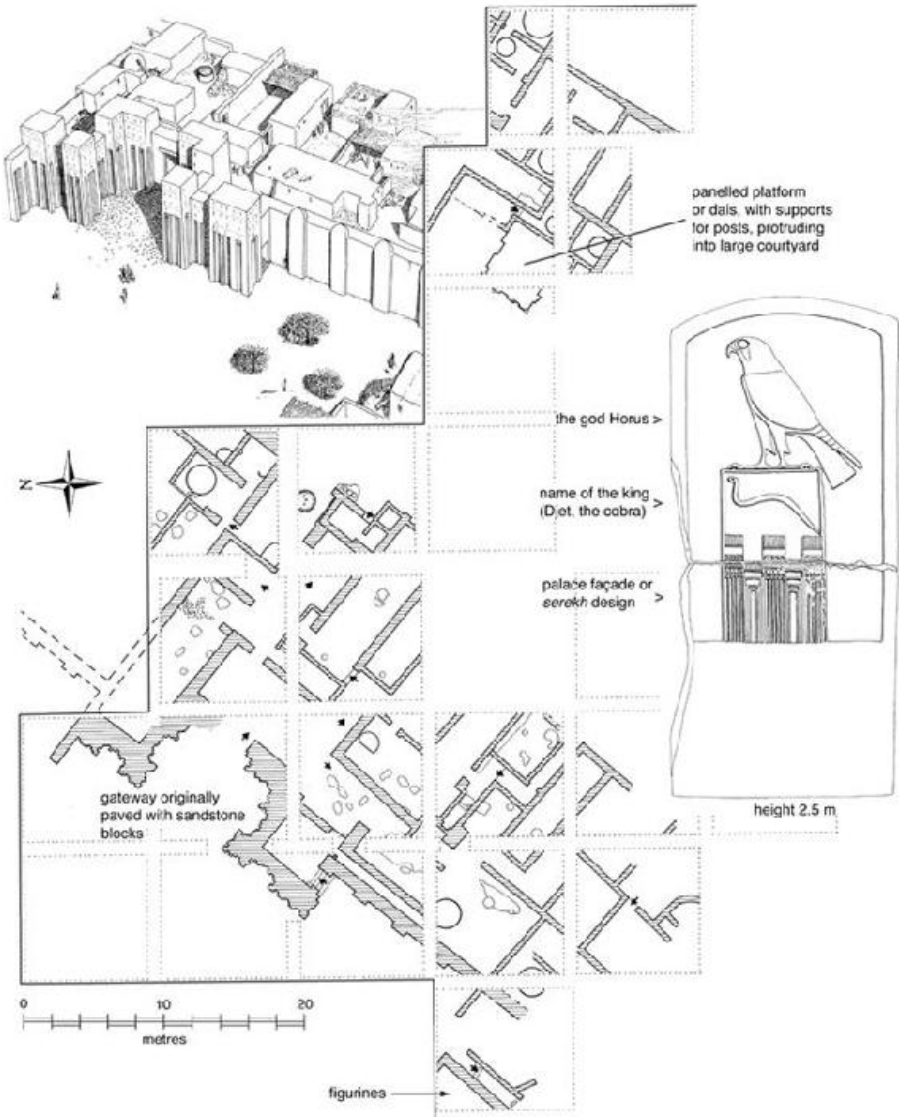


*Figure 2.9*Hierakonpolis: a mud-brick ruler's compound (or 'palace') of the Early Dynastic Period. The niched 'palace wall and gateway' appears also in Figure 2.8, p. 77, and Figure 5.2, p. 198. From front to back the ground level rose, so that the panelled platform was higher than the entrance. The small arrows mark upward slope. Omitted are various walls, mainly in the central open space, which seem to belong to an Old Kingdom town-phase which followed, although much of the rear was also buried in sand, whether naturally blown in or deliberately dumped is not clear. After W.A. Fairservis, *The Hierakonpolis Project, Season January to May 1981. Excavation on the Kom el Gemuwia*, Poughkeepsie, NY, Vassar College, 1986, Figures 7A and 7B; also K. Weeks, *JARCE* 9 (1971–2), unnumbered figure after p. 33. *Inset.* The substance of early monarchy: the name of King Djet of the First Dynasty (*c.* 2950 BC), written with the hieroglyphic sign of the cobra, appears above a stylized

rendering of the distinctive architecture of the royal palace. The Egyptians called this a *serekh*, and a common modern term for the style is 'palace-façade'. Standing above is a figure of the falcon god Horus, of whom each king was an embodiment. Funerary stela of King Djet, from his tomb at Abydos. After A. Vigneau, *Encylopédie photographique de l'art: Les antiquités égyptiennes du Musée du Louvre*, Paris, Editions "Tel", 1935, 4.

Another portion of the early town to have survived is a site of what had been either the principal shrine or a site for royal ceremonial (described below, pp. 129–32 and Figure 3.9), within which, much later, quantities of objects from the late Predynastic/Early Dynastic Period had been buried, some of them of the finest craftsmanship, being no longer needed for display. The royal associations are plain. The deposits include statues, stone vases and other fragmentary inscribed pieces of one or more kings of the late Second Dynasty and, above all, the Narmer Palette (Figure 2.10). This remarkable object, carved in low relief on both sides of a palette of siltstone ('slate'), portrays a victory over a northern enemy by a King Narmer from the very beginning of the First Dynasty. He wears the crowns of Upper and of Lower Egypt, and is faced on one side by a figure of the god Horus. The whole is decorated according to the full artistic canon of Pharaonic Egypt, displays certain of the key distinguishing marks of kings in its depictions of Narmer, and contains small groups of hieroglyphs. The Narmer Palette encapsulates certain of the essential elements of Pharaonic culture, and announces their presence at the very beginning of the dynastic sequence.

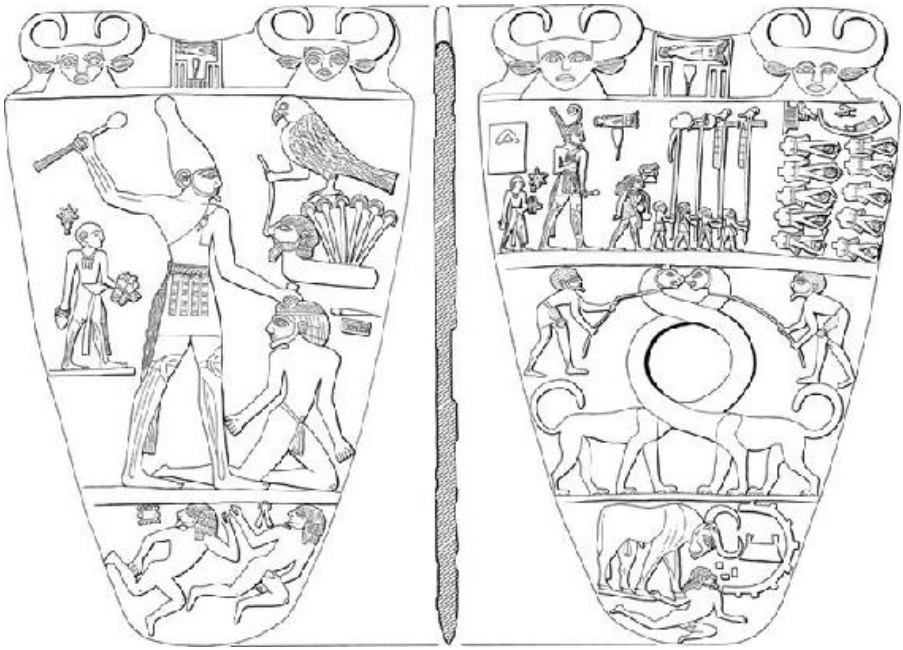


*Figure 2.10*The Narmer Palette, 63 cm high, is a slab of siltstone (or 'slate') carved on both sides with scenes commemorating the reign of a king with the Horus name of Narmer (written at the top in the 'palace-façade' rectangles), who must have lived immediately prior to the beginning of the First Dynasty and may well have been the last and greatest of the kings of Dynasty 0 of Hierakonpolis. On the *left side*, Narmer, wearing the white crown of Upper Egypt and other insignia of early monarchy, stands with upraised mace about to smite a kneeling captive. Beside the captive's head a group of hieroglyphs gives his name as Wash. The design above probably conveys the supplementary message that the Horus-king (the falcon) has won a victory over an enemy based in the delta, of whom Wash was presumably the ruler. Behind Narmer is a high-ranking figure who carries the king's sandals. On the *right side,* the images of conquest in the top and bottom registers are balanced by the central design which expresses harmony, in the form of the intertwined and captive mythical animals. In the top register Narmer, now wearing the red crown of Lower Egypt and accompanied by two men of high and distinctive rank, walks to inspect two rows of bound and decapitated enemies. The party is preceded by four bearers of standards of distinctive shape. These standards were later called the 'Followers of Horus', or 'The gods who follow Horus'. Whatever their origin, by the time of Narmer they were clearly part of the array of symbols which contributed to the unique aura of kingship. The symbols above the decapitated enemies cannot be interpreted with confidence. In the lowest register the conquering power of the king, symbolized by a bull, is directed against a walled and fortified town. The drawings of the palette are after J.E. Quibell, *ZÄS* 36, 1898, Taf. XII, XIII; Quibell and Petrie, *Hierakonpolis* I, Pl. XXIX; Petrie, *Palettes*, Pls J, K; V. Davies, *Nekhen News* 10 (1998), 22.

Hierakonpolis became the home of one form of the god Horus, called Horus of Nekhen (Hierakonpolis). Aside from his connection with kingship, Horus (and to a lesser extent his female counterpart, the goddess Hathor) was, in historic times, an important figure in the

Egyptians' speculative universe, having widespread immanence in specific local forms. He was thus, at one and the same time, universal and local, although how far his universality was recognized in predynastic times is difficult to judge. The name Horus means 'The One on High', and as such he appears in a boat astride a pair of wings in the sky, above a second Horus figure surmounting a king's name (Figure 2.11 (2)). Later thinking located Horus more particularly at the horizon, and associated him with the sun god Ra at the time of sunrise, in the combination Ra-Horakhty ('Ra-Horus of the horizon'). Early representations (Figure 2.11) also stress a violent aspect and show him wielding weapons – a spike, a harpoon, a mace-and-shield or a hoe (for hacking down walls) – an aspect which survived into much later times as 'Horus, avenger of his father' (Osiris) and 'Min-Horus, the victorious', the object of a cult at Abydos. These varied associations illustrate the way that Egyptian thinking created networks of meaning that spread out from an initial name and image and followed pathways of open association.

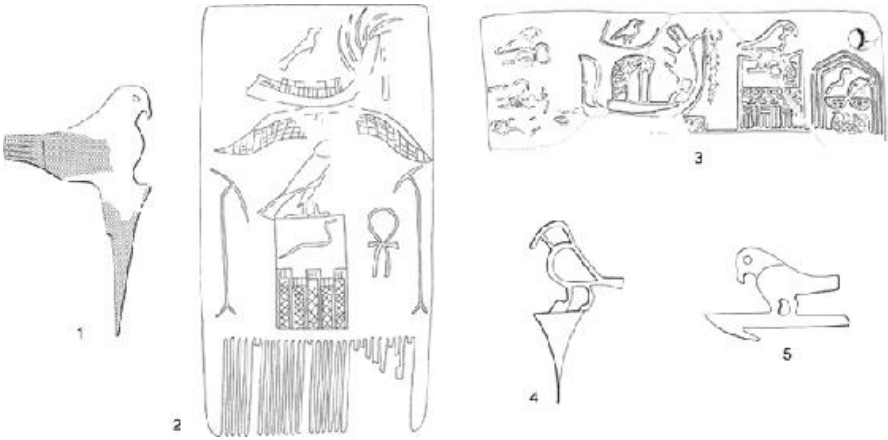


Figure 2.11 The dual aspects of Horus: as heavenly power, wielding instruments of destruction, and as earthly ruler. Nos (1), (4) and (5) are figures of Horus wielding a spike or harpoon. On (3) (*left*) he also wields a mixture of mace, shield and hoe. Towards the right side of (3) the Horus name of the king, Aha ('the fighter'), written with a mace-and-shield hieroglyph, is borne as an emblem by the figure of Horus. In (2) and (3) the ubiquitous nature of Horus as heavenly power is symbolized by a boat which, in (2), is also borne aloft by a pair of wings. The Horus name of the king commemorated on (2), Djet, is the same as that depicted in Figure 2.9, *inset*. (1) is a reconstructed figure on the side of one of Coptos colossi (see Figure 3.11, p. 134). (2) is an ivory comb, length 8 cm, from Abydos. After R. Engelbach, *ZÄS* 65 (1930), 115–16; Tiradritti, *Cairo Museum*, 44. (3) is the top register of one of a pair of ivory year-labels from Nagada, width 5.6 cm. After V. Vikentiev *ASAE* 33 (1933), Pl. II; Tiradritti, *Cairo Museum*, 42. A companion piece fills in the missing area of water beneath the central boat, J. Garstang, *ZÄS* 42 (1905), 62, Fig. 3.

In historic times local forms of Horus (and Hathor) appear both within Egypt and in certain foreign territories under Egyptian control. 'Horus Lord of Hebenu' was, for example, the presiding divinity at the town of Hebenu in Middle Egypt (the archaeological site of Zawiyet Sultan or Zawiyet el-Meitin); 'Horus Lord of Buhen' and 'Horus Lord of Miam' were cults set up by the Egyptians at two of their later fortresses in Nubia, Buhen and Miam (modern Aniba). Two more of these topographically defined Horus gods appear on the El-Lisht throne bases: 'Horus, Lord of Mesen' and 'Horus, the Behdetite', but here, as we have seen, they stand for Lower Egypt. Yet the first time that 'Horus of Behdet' appears, on a carved stone panel beneath the Step Pyramid (*c*. 2570 BC), the symbolic connections are actually with Upper Egypt.[33] There has to be the strong suspicion that the Lower Egyptian association of Horus is the product of rationalization, taking place during the dynastic period and reflecting an interest in creating a geographically comprehensive picture of how elemental power was distributed across the Egyptians' world. The celestial Horus, who also embodied each king, was perfectly fitted to this mobile role.

Hierakonpolis remained important during the Old Kingdom, becoming a walled town of densely packed buildings.[34] Thereafter it seems to have declined as a centre of settlement, although its temple remained in use and was rebuilt in the Middle and New Kingdoms and perhaps in the Ptolemaic Period. It may have exemplified the imbalance between size of later temple and size of adjacent settlement known from other places (especially some in New Kingdom Nubia). Its place as a major focus of urban life on the west bank in this part of Egypt was taken over by Edfu, 15 km upstream (incidentally illustrating how the competition between towns and their elites that had given rise to the early state remained active long afterwards). The archaeological record here reveals a place of negligible significance in the early periods.[35] Only with the late Old Kingdom, perhaps the Fifth Dynasty, does a walled town seem to have appeared, which then grew, reaching a maximum extent in the First Intermediate Period. The rise of Edfu as a regional centre at the expense of Hierakonpolis led to one of several outbreaks of local internal warfare in the early part of the First Intermediate Period. In the course of this, Edfu was for a time taken over by the governor of the Hierakonpolis region, a man named Ankhtify who, to judge from the location of his tomb at Moʾalla, lived not at Hierakonpolis itself but 50 km downstream, near the northern border of the nome (province). By the early Middle Kingdom, a Horus cult at Edfu had become prominent, remaining so

until Ptolemaic and Roman times and attracting the resources for the monumental sandstone temple of that late era that still stands almost intact. The place names Behdet and Mesen, primarily Lower Egyptian names, came to be used as synonyms for Edfu, a recognition of its symbolic status. The changing mythical role of Horus exemplifies how traditions, which are bound to be inventions in themselves, are moulded and reshaped as history moves on.

Much of our knowledge of ancient Egypt is the result of huge labours – the collection of information and its interpretation – that gathered momentum in the late nineteenth century AD. For many topics within Egyptology, progress now takes the form of reinterpretation of sources that have been known for a long time. One of the biggest exceptions is the prehistory and early history of the Nile delta. Well into the second half of the twentieth century little was known of its early archaeology beyond a few sites situated on its desert margins (principally the early Neolithic village of Merimda Beni Salama on the west, and the town of Maadi on the east, the latter barely in the delta and part of a probable spread of settlements in the area that eventually coalesced into the city of Memphis across the river on the west). What constitutes modern field archaeology, its multiple techniques for investigating the ground and the professional standards of recording and interpretation, has nowhere in Egypt been demonstrated to greater effect than in surveys and excavations across the flat landscape of the delta, particularly its eastern part.[36] For Upper Egypt (or at least its southern part, south roughly of Abydos) it still seems to make sense to develop a narrative of explanation that combines some of the elements of the mythology of historic times with archaeological evidence, all the time being aware of how readily traditions are invented (including myths of origin). So far, this chapter has followed this path. In the case of Lower Egypt, however, this approach barely works at all. Archaeology now offers a wealth of information on early settlements and their cemeteries that creates a narrative of cultural development that stands on its own with fewer points of contact with later historic traditions (as they have survived). It is notable that one site which must have been important in its time (Tell el-Farkha) has no ancient name that we can give to it, and the same is true for others identified by archaeology in the delta.

Early settlements spread across the full extent of the delta, a width of some 400 km in the north (Figure 2.5, p. 73). Their material culture shows sufficient similarity to justify a single term of reference: Lower Egyptian culture (though Maadi or Maadi-Buto culture are terms that

have also been used). They seem to show a broadly similar course of development. Built structures, which must have been mostly dwellings, were of wooden posts and wattle-and-daub screens (as was to be found also at Upper Egyptian sites). The dead were buried in individual graves in separate cemeteries, along with modest amounts of burial goods. Material culture, especially pottery and flintwork, shows affinities with the contemporary Chalcolithic culture of Palestine, though the wider implications of this are not well understood. Lower Egyptian culture seems to be broadly contemporary with the earlier part of the Nagada sequence of Upper Egypt. Then, beginning seemingly in the Nagada IIC–D phase (*c*. 3350 BC), the way of life at these places changed. Mud-brick buildings of larger size and greater regularity of plan appeared, along with pottery and other kinds of objects that belong to the material culture traditions of Upper Egypt, as defined by the site of Nagada. At two of these sites, Tell el-Farkha and Tell Ibrahim Awad, groups of figurines have been discovered that are Lower Egyptian counterparts (though with stylistic differences) to groups from Upper Egypt that represent a tradition that began towards the end of the Predynastic Period (Dynasty 0) and continued for some time afterwards (they are discussed further in the next chapter). Amongst those from Tell el-Farkha are two of standing human males, figures of authority, originally of wood overlaid with gold foil and with inlaid eyes of lapis lazuli (Figure 2.12).

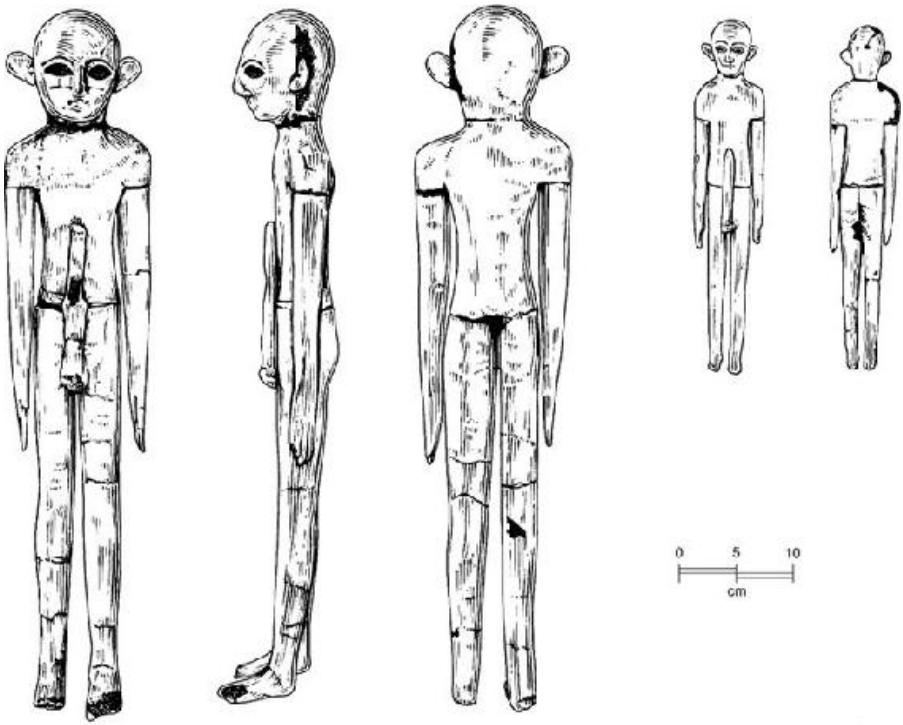


*Figure 2.12*Early heroes from the eastern Nile delta, perhaps rulers. Originally of wood covered with gold leaf, they come from the Nagada IIIB phase of the town site at Tell el-Farkha but could have been made earlier. The height of the larger is *c*. 60 cm and of the smaller *c*. 30 cm. The gold had been fixed in place with many gold rivets, 4 mm long. The inlaid eyes are of lapis lazuli, originally with pupils and eyebrows of another material (now lost). A group of beads was found lying over the larger figure and possibly represents a necklace. After Chłodnicki et al., *Tell el-Farkha*, 203, Fig. 3; and photographs by Kemp. The pieces are in the Egyptian Museum, Cairo. Drawings by A. Boyce.

During this time (within the period of Dynasty 0) it is likely that the whole territory of historic Egypt, from the northern coast of the delta to the First Cataract at Elephantine, had become a single kingdom, under the rule of kings whose family base was in southern Upper Egypt. Another important site of Lower Egyptian culture is Tell el-Fara'in where, in later times, the city of Buto was to be found, centre of the cult of the cobra goddess Wadjit, a protectress of the king. Early in the First Dynasty a large, carefully laid-out building with an intricate internal plan was constructed of mud bricks that attracts the term 'palace' (Figure 2.13, and see Chapter 5, pp. 195, 215). This is the most obvious connection between a Lower Egyptian place and later myths of kingship. The 'palace' approximately corresponds in time with complex mud-brick architecture at Tell el-Farkha (Figure 3.7, p. 126), on a part of the site which was

subsequently abandoned.

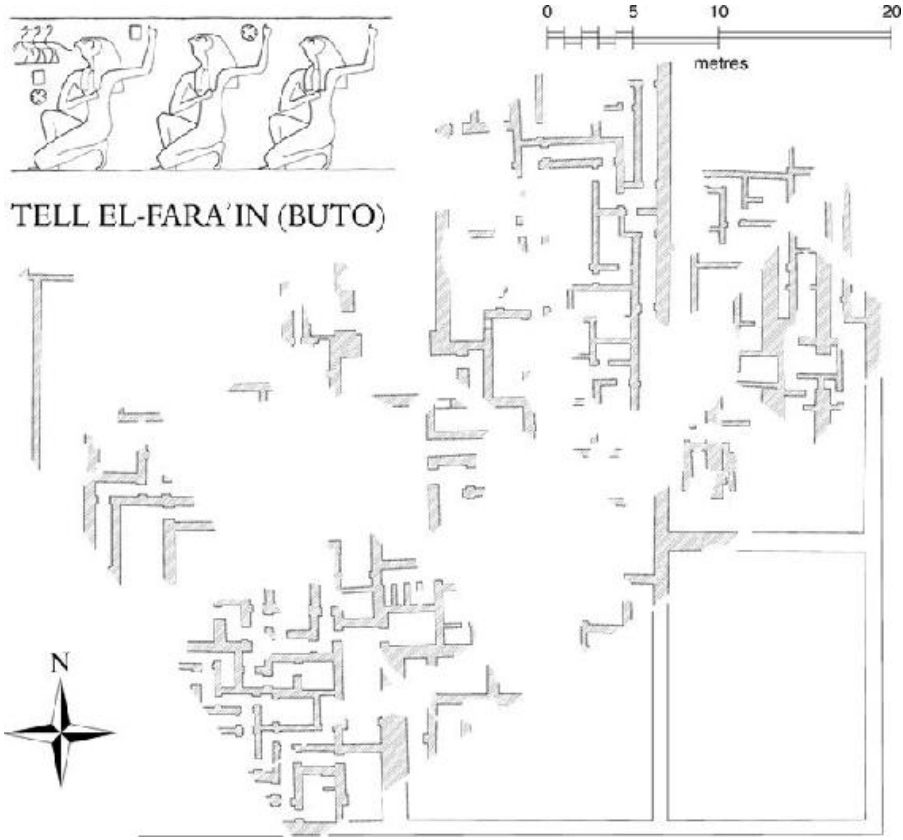


*Figure 2.13*Plan of a building at Tell el-Fara'in (Buto) in the north-western delta. It dates to the Early Dynastic Period. The interlocking pattern of rooms and corridors is a feature of urban architecture of the time, continuing through the Middle Kingdom (Chapter 5). The size, elaboration and complexity of the building suggest that it served as a centre of authority and administration, and is thus entitled to be called a 'palace'. After U. Hartung, 'Recent investigations at Tell el-Fara'in/Buto.' In Midant-Reynes and Tristant, *Origins*, 2012, Fig. 13; Moeller, *Urbanism*, 106, Fig. 4.32. *Above*. In later centuries Buto (as well as Hierakonpolis) was thought to be the home of 'souls' (royal ancestral spirits), here shown as hawk-headed beings, labelled 'Souls of Pe', one of the names of Buto. After E. Naville, *The Festival-Hall of Osorkon II in the Great Temple of Bubastis (1887–1889)*, London, EEF, 1892, Pl. IX.6.

In the process of state formation, societies pass through an unstable period of local competition led by elites, some of whom are more successful than others in enlarging their territory and the number of places made subject to their control. They reward themselves with more desirable goods and with distinctive marks of their elevated status, including more distinctive residences and ceremonies that allow their power to be paraded before others. A process of this kind must lie behind the growing evidence for early settlement in the delta.

The process continued to be played out even after a single kingdom was created. This is evident in the decline and disappearance of some of these settlements after the Early Dynastic Period, as well as written and artistic evidence for a conflict between south and north at the end of the Second Dynasty (*c*. 2600 BC; Figure 2.18 (4), (5), p. 95).

The discovery of so much evidence in the delta where, until the late twentieth century AD, there was so little also highlights that archaeology has so far failed to locate what ought to be a wealth of early sites on the floodplain of Middle Egypt, given that it is a particularly fertile part of the Nile valley. The most likely explanations for what looks increasingly like an anomalous gap in knowledge are that early settlement sites are buried more deeply below the present floodplain and that less intensive archaeological survey has been carried out. On the map of Figure 2.6, left (p. 74), I have assumed that settlements and their political counterparts extended unbroken through Middle Egypt.

Throughout the dynastic period, with only isolated exceptions (of which the most conspicuous occur in the Second Intermediate Period; see above, pp. 41–3), the visible culture of Egypt was more or less uniform from Elephantine to the Mediterranean. But predynastic Lower Egyptian culture represents a period of perhaps four centuries when this had not yet come about, and aspects of culture at places in the north seem to have been different. Uniformity came about through the northward expansion of the Nagada culture of which the towns of Nagada and Hierakonpolis were important centres. Some commentators stress the role of trade in promoting uniformity and also the particular attraction to people living in Upper Egypt that access to trade routes that connected the delta to Palestine and the Near East would have had, drawing them to migrate northwards. Cultural differences notwithstanding, a settled farming way of life seems to have developed in the north at least as early as it did in the south. The same competitive processes leading to the emergence of local elites must have begun to come into play there as well, losing out only in the later stages of disequilibrium.

The significance of this difference is hard to evaluate. So much that makes up culture and identity is not expressed directly through material remains and so leaves the archaeologist of prehistory with little that is firm to grasp. The ability to organize and to fight is not, for example, wholly to be measured in how well villages are constructed and how ornate are the pots. Thucydides in the fifth century BC made the point tellingly in a contrast between Athens and

Sparta, both great powers, yet the latter 'simply a collection of villages, in the ancient Hellenic way'. He invites the reader to imagine Sparta reduced to ruins: 'I think that future generations would, as time passed, find it very difficult to believe that the place had really been as powerful as it was represented to be.'[37] The archaeological evidence from Buto suggests that palace culture, if such it was, arrived only with the First Dynasty, but that does not answer the Thucydides paradox: that power and display are not wholly dependent upon one another. We are not entitled to judge from the modesty of material remains that Buto and other Lower Egyptian places had not previously been sufficiently organized to engage in warfare.

This brings us back to the topic of identity. In the south, the material culture of Nagada had much in common with that of northern Nubia, its neighbour, and the peoples of the two areas were closely similar at the skeletal level. Yet we know, because the difference persisted into historic times, that the two societies were divided by language and that Egyptians of later periods saw Nubians as a different people. To the north the distinction, at the level of archaeology, between the Nagada and Lower Egyptian cultures seems to be larger. At the same time, it is possible to trace something of a continuum in material culture from the eastern delta across northern Sinai and into southern Palestine, something that persisted into the Early Dynastic Period. There might not yet have developed that sense of Egyptian identity that is a feature of the Pharaonic periods. People who lived in these communities of the north and the south may have identified more closely with those who lived in neighbouring communities, in a chain that extended beyond the frontiers that were only later established and maintained, particularly those of Sinai/ Palestine, Libya and Nubia. In a world of multiple local identities, if you lived in the north-eastern delta, the places in northern Sinai might have seemed as culturally close to you as those deeper into the delta to the west and south.

This leads on to a question that cannot be answered. Did the people of the delta speak the same language as that of the southerners? In our own era, experience over the past few centuries of the expansion of cultures that have become dominant is that language is a ready victim in the reduction of cultural diversity. There is, I would have thought, some justification for holding that the separate identity that the north seems initially to have had was expressed not only in material culture but in its own language. The conspicuous 'Egyptianness' of the historic periods, which was later so easily able to absorb outsiders, might itself

have been the result of the northward expansion of an Upper Egyptian identity in which language played a key role. We are unlikely ever to be able to explore this possibility further, but should retain it as an option.

Late in the Predynastic Period a third major player emerged in Upper Egypt, represented through archaeology by the site of Abydos (Figure 2.14).[38] Throughout the Pharaonic periods Abydos remained a town on the edge of the desert, one of those places that coalesced from several tiny settlements at the end of the Predynastic Period. From the Middle Kingdom onwards it was nationally famous for its cult of the god Osiris, whose tomb was thought to be in the desert behind Abydos and was a place of pilgrimage for any who wished to enhance the prospects of resurrection after death. It seems never to have served, however, as a regional centre. That position, in historic times, was held by the city of This, which seems to have lain close to the river, probably in the vicinity of the modern town of Girga. The local inhabitants of predynastic times used a number of cemeteries on the desert edge. But further out across the sand, at the very place which was later seen as containing the tomb of Osiris, a separate cemetery developed (in modern times named the Umm el-Qaʾab, 'mother of pots', on account of the vessels left by pilgrims of later periods), beginning in the Nagada I phase of the Predynastic Period and culminating with the actual tombs of the kings of the First Dynasty. As revealed by excavation, it is a classic demonstration both of long continuity (potentially 800 years to the end of the First Dynasty) and of the emergence of social and economic disparity, in this case the emergence of the people who would become the rulers of all Egypt and the founders of the dynastic state. I will return to the architecture of the funerary monuments of the Early Dynastic kings at Abydos later in the chapter. For the moment we will concentrate on the area of the Umm el-Qaʾab where the tombs of their immediate predecessors were located, designated Cemetery U.

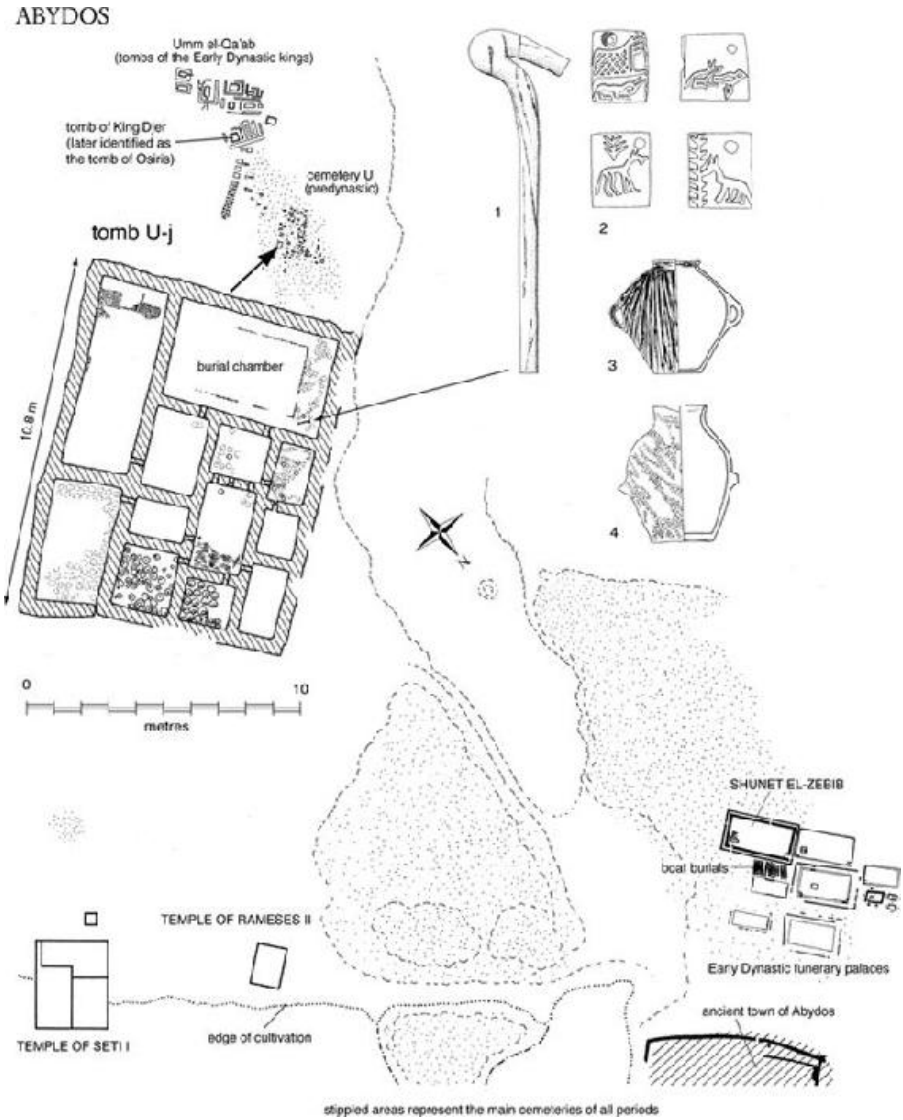


*Figure 2.14*Abydos and Egypt's early kings. Superimposed on the sketch map of Abydos is the plan of tomb U-j of 'Dynasty 0' and of some of its contents. (1) Ivory sceptre of office (originally painted red). Height 33.5 cm. (2) Four ivory labels incised with early hieroglyphic signs. (3) and (4) Two examples of the approximately 200 imported Palestinian pottery storage jars (decorated with red-brown lines) found in position in the tomb. After Dreyer, *Umm El-Qaab* I, Abb. 2 (plan), 147, Abb. 85 (sceptre); 122, Abb. 77 (labels); and 103, Abb. 66 (pots). For the Shunet el-Zebib and other adjacent enclosures, see the sources cited in note 51. The distance between the ancient town of Abydos and the Umm el-Qaʾab is *c*. 2.5 km.

Mostly it had been badly disturbed by the time it was investigated by archaeologists, and the contents of the individual tombs to some extent scattered. But the earliest of the recognizable names of kings

come from here, and they form a sequence estimated to have numbered 12, which extends before the start of the later king lists and our own sense that Egyptian history had begun. The custom has grown up of referring to these rulers collectively as forming 'Dynasty 0', as a way of marking their kingly status in relation to the unassailable numbered list of dynasties given to us by Manetho in the early third century BC. One tomb (its modern designation U-j), better preserved than most, provides a particularly valuable point of reference (see Figure 2.14).[39] Its 12 brick-lined chambers were intended to house a richer burial than its predecessors, one of the chambers still containing over 400 wine jars. Left over from the debris of robbery were the remains of an ivory ceremonial sceptre and 173 small bone and ivory labels originally attached to other commodities to identify them by means of groups of signs. Though hard to read with confidence they must count as the earliest use of hieroglyphic writing that we can recognize.

The owner of tomb U-j lived at a time (in cultural terms Nagada IIIA2, thus *c*. 3300 BC) when Nagada culture had spread across the delta. Competition for supremacy amongst the rulers of Egypt's proto-states had probably entered a phase when it seemed feasible to aim to become the ruler of the whole territory of the north and the south. Did this man achieve this position? Was he from a long-resident line of local rulers who were in the process of enlarging their territory, or was he one of the rulers of Hierakonpolis who, having extended their territory northwards to include an existing cemetery on already sacred ground, were now taking advantage of the opportunity to locate their own tombs there, too? Related to this is the equally difficult question as to whether there is any real historic connection between the choice of this piece of desert for a cemetery by a royal family, and the selection by later generations of one of the tombs (of King Djer, *c*. 3050 BC according to radiocarbon dates) as supposedly the tomb of Osiris?[40] For our present concerns we should note that yet another fundamental aspect of Egyptian myth, intertwined about kingship and the tension between Horus and Seth, has a strong connection with an archaeological site in Upper Egypt central to the emergence of the Egyptian state.

In the principal king lists (Saqqara excepted) the earliest name is Menes and his should be one of the tombs on the Umm el-Qaʾab.[41] As first king of the lists Menes has tended to attract more attention in modern than in ancient times. For there appears to have been no special body of legend attached to him. In the Ramesseum (the

mortuary temple of Rameses II) a short list of all the kings of the New Kingdom down to Rameses II is prefaced first by King Menthuhetep II of the Eleventh Dynasty, victor of the civil war of the First Intermediate Period, and before him by Menes. But we cannot be sure if this reflects any special knowledge of Menes as the first unifier, or is a deduction from the simple fact that his was the first name in other lists. The Saqqara king list actually omits him, starting its enumeration a few reigns further on. This is particularly surprising in view of the fact that Herodotus records a story that Min (as he calls him) founded the city of Memphis, to which Saqqara belonged as the principal cemetery. Manetho has nothing special to say at all. His entry for Menes reads: 'He made a foreign expedition and won renown, but was carried off by a hippopotamus.'[42]

Menes belongs to the final stage in state formation. One new aspect of the dynastic state was the keeping of written annals: brief hieroglyphic notes on the most significant events in a royal year. The Palermo Stone was compiled from such documents. These records seem to have commenced with the period of Manetho's First Dynasty (the earliest belonging to the reign of Narmer himself, he of the famous palette, Figure 2.10, p. 81). This may have been sufficient reason for later generations to start their lists with Menes (to be identified with either Narmer or Aha, his likely successor): he was simply the first of the kings to have a reign properly documented by annals. I mentioned earlier that the Turin king list ventured beyond Menes, with groups of unnamed 'spirits' or 'devotees' placed between Menes and the gods. The Palermo Stone provides us with a clue as to the origin of this tradition. Along the very top of the stone ran a line of little rectangular boxes which contained not the events of the passing years but simply names plus little pictures of seated kings. On the main fragment, they wear the crown that, in historic times, had come to signify the kingship of Lower Egypt. On another, in the Egyptian Museum, Cairo, they wear the double crown. These names must belong to prehistoric kings about whom nothing more was known by the Fifth Dynasty, when the Palermo Stone was engraved. When grouped as 'spirits' by the even later Turin king-list compiler they made a suitable transition between gods and real kings with recorded reigns. For us there is the temptation to take them as the kings of Dynasty 0, in charge of several territories – the proto-states – throughout Egypt. The noteworthy fact that on the Cairo fragment some of these little figures wear the double crown means also that the Egyptians themselves did not, at least in the Fifth Dynasty, see Menes

as the very first king of a unified country. If it is a reliable tradition (and it is a big 'if'), it fits in with a more protracted political history of formation of a unified state, such as the archaeological and artistic record implies.[43]

Foundations of ideology (2): the containment of unrule

State formation seems often, perhaps normally, to involve violence, although violence against other human beings was not something that only appeared at this stage in human development. As already noted (p. 49), many of the people buried in the late Palaeolithic cemetery at Gebel Sahaba several millennia earlier had suffered weapon injuries. At the heart of state formation is dispossession, of land and of status. The feeling of collective identity is injured by subordination. The history of large parts of the world (whether documented by written sources or not) is a palimpsest of dispossession and subordination. The consequence can be resentment that lasts for centuries expressed through sporadic violence. And dispossession goes on. As I write, regular news bulletins report on the attempt at state formation in Syria and northern Iraq by people of complex loyalties but primarily to an idea, the re-creation of a Khalifate. Without extreme violence it would have made no progress in taking territory and it has, in response, provoked violent retaliation. Although its weapons are modern, it chooses to behead its enemies and others of whom it disapproves – a practice which, in Egypt, we first meet on the Narmer Palette, where one of the symbols of the king's position as supreme leader is rows of beheaded men (Figure 2.10, p. 81; in Figure 2.16, *above*, p. 92, the beheaded figures are enemies of the gods). One wonders to what extent ancient Egyptian history incorporates a largely invisible river of resentments.

Violent conflict is one of the themes of a range of delicately carved low relief scenes in soft stone and ivory which must have originated from the courts or elite households of predynastic Upper Egypt. They contain their own symbolism. Some elements survived into the iconography of historic times, but we cannot be sure if the values and meaning were modified in the course of transmission. More seriously for our chances of correct understanding is the absence of many of the most distinctive features of the iconography of historic times. Thus almost the whole of the later iconography of kingship is missing, at

least until the very end of the sequence of the objects in question. The end is represented by the Narmer Palette and a few comparable carvings (most notably the king Scorpion mace head, also from Hierakonpolis). As objects – commemorative palettes and large mace heads – they belong to the world of the late Predynastic Period. But in their content and style the last pieces are the products of a great codifying of traditions that took place immediately prior to the beginning of the First Dynasty. At this time, and building on the work of the creators of earlier commemorative pieces, creative individuals thought out or invented a remarkably homogeneous intellectual system. It embraced hieroglyphic writing, formal commemorative art of the kind that became one of the hallmarks of Pharaonic Egypt, and a basic iconography of kingship and rule. It was, in total, not quite the Egyptian culture of later centuries. Particularly in formal architecture and its meaning the Early Dynastic Period acquired a tradition of its own which was subsequently, during the early Old Kingdom, subject to a second major re-codification of form and meaning. But despite later reworkings the meaning of Early Dynastic culture is to some extent accessible to us because of the wealth of later material in the same style. This is far less true of predynastic material. The process of conscious, academic codification that laid down the initial rules by which we now interpret Egyptian culture also acts as a barrier to our understanding of the material that had been produced by previous generations, during the late Predynastic Period. Another way of looking at what happened is to see it as the 'evolution of simplicity', in which potential design alternatives were dropped in favour of variations within a single design style. The process is illustrated by a study of Early Dynastic writing, which shows that it utilized a far larger corpus of signs than that of later Pharaonic hieroglyphic script. 'As a result of a thoroughgoing process of redefinition, half of the corpus was filtered out before the Old Kingdom.'[44]

One of the most prominent aspects of these decorated objects is the use of animals, both real and imagined, as allegories or proxies of the forces of life (Figure 2.15). The species are primarily of the deserts, not those from which the Egyptians later developed animal cults. Sometimes they occur alone, sometimes they share a scene with human figures. They engage in violence, the predatory strong attacking the weak, or are at rest. Prominent is a harmonious pairing and balancing of particularly fierce beasts: wild dogs, lions and long-necked mythological creatures. They are always quadrupeds, and in no respect do they show a resemblance to the figures of Horus and

Seth. One example occurs on the Narmer Palette, and here the context implies that the paired beasts stand for a political harmony. The theme generally conveys powerfully the intention on the part of the artist to depict an ultimate, attainable harmonious framework to a turbulent world, the framework in the form of reconciled opposites, portrayed in allegorical form. An alternative depiction of order, again using animals to symbolize raw, natural life-forms, was by peaceful processions of animals, arranged in horizontal rows one above another. Sometimes they are accompanied by a more heterogeneous group of 'shepherding' figures that must symbolize a form of control. (They comprise the hunting-dog and lion, catfish, a star or rosette sign, and (with some doubt attached) a stork and a serpent.) Sometimes, too, the orderliness was emphasized by using parallel horizontal base lines on which the animals stand. In these cases we can see the beginnings of the division of artistic space into defined horizontal bands (registers) that was to become such a distinctive feature of Pharaonic art. The use of animals as an allegory of untamed chaotic life-force survived into the temple art of historic times, most notably in scenes of king and gods capturing wild birds (and in the Graeco-Roman Period animals as well) in a huge clap-net, where texts and context make it clear that the symbolism is of the containment of disorder (Figure 2.16, *below*).[45]

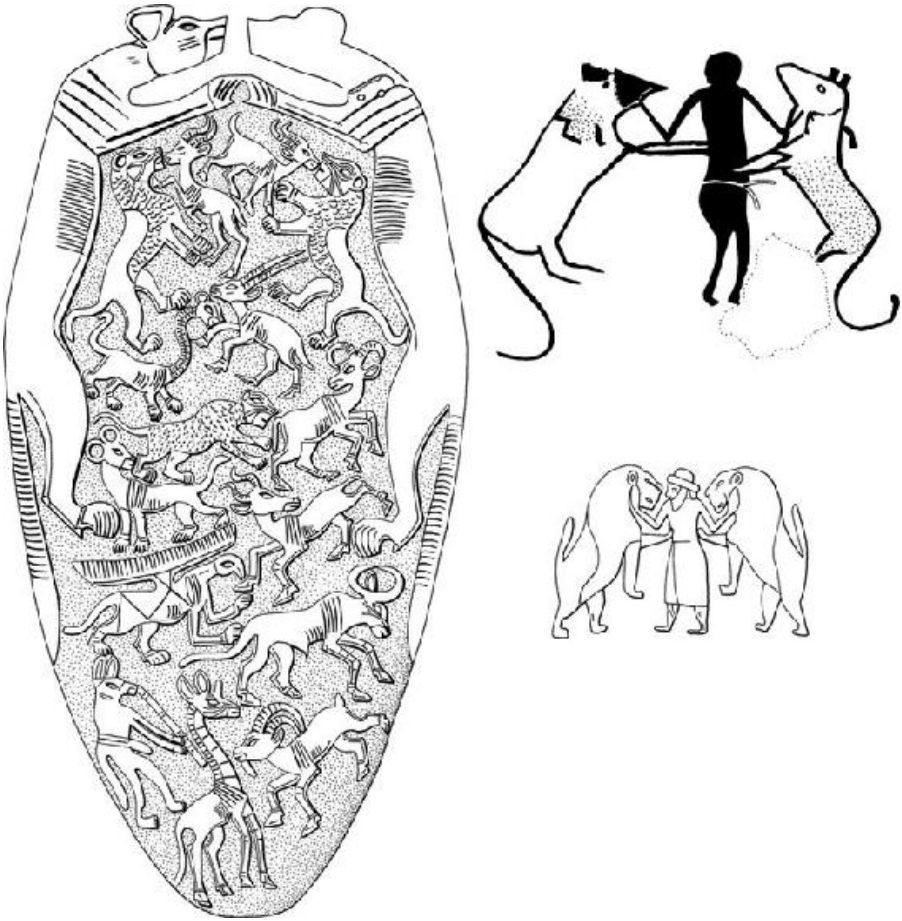
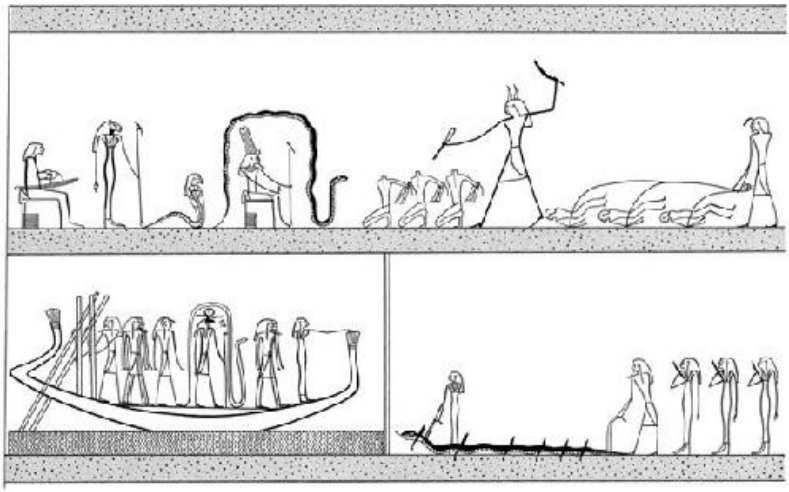


*Figure 2.15*The containment of unrule. *Left*. The smaller Hierakonpolis (or Two-dog) Palette, reverse side. It portrays life allegorically as an unequal conflict between the strong and the weak, seemingly animated by the flute-playing presence of the Seth-like figure in the bottom left corner. The pre-eminent predators are the facing lions at the top who are, however, not far from a point of equilibrium in which their powers are mutually balancing. This ultimate point of harmony is hinted at by the framing figures of the fierce hunting dogs. *Right*. The actual point of arrested conflict is shown as having been achieved in two other scenes in which the facing lions are now held apart by a male human figure, perhaps a king. The upper example is from tomb 100 at Hierakonpolis (see also Figure 2.8, p. 77); the lower is on the Gebel el-Arak knife handle. Photographs of the palette are in Petrie, *Palettes*, Pl. F; Quibell and Green, *Hierakonpolis* II, Pl. XXVIII; Mellink and Filip, *Frühe Stufen*, Taf. 208. For the Gebel el-Arak knife handle see Mellink and Filip, *Frühe Stufen*, Taf. 210; *Ancient Egypt* 1917, 29, Fig. 4.



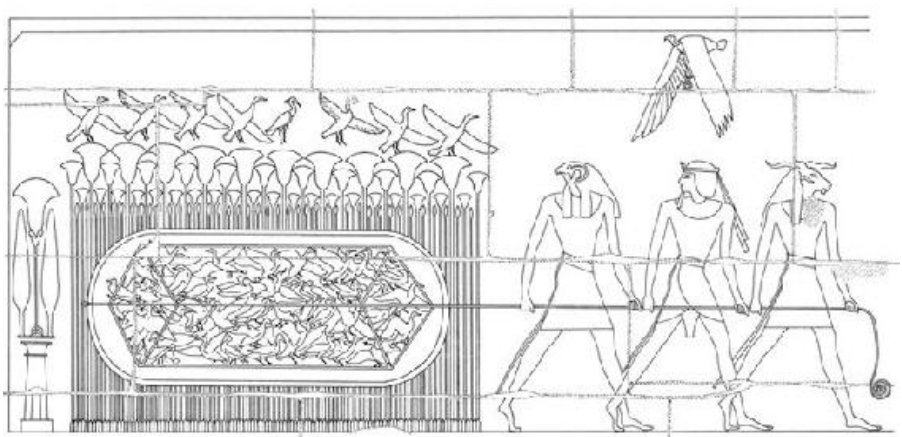


Figure 2.16Above. The theme (containment of unrule) transferred to a cosmic plane of cyclic rebirth in which the triumphant voyager is the sun god, here passing in his barque through one of the hours of the night. In the upper register are three beheaded figures identified as 'the enemies of Osiris', and three prostrate figures labelled 'the rebels'. In the lower register the demon of evil, the giant serpent Apopis, is butchered. Part of the Seventh Division of the 'Book of What is in the Otherworld' as painted on the walls of the tomb of King Tuthmosis III in the Valley of the Kings at Thebes (*c*. 1430 bc). The cursive hieroglyphic text has been omitted. After A. Piankoff, *The Tomb of Ramesses VI*, Part I, New York, Pantheon Books for Bollingen Foundation, 1954, Fig. 80. *Below*. The same theme illustrated by simple allegory from nature. Disorder is symbolized by the wild fowl of the papyrus marshes. They are trapped and therefore constrained by a fowler's clap-net operated by King Rameses II and the gods Horus (*left*) and Khnum (*right*). Great Hypostyle Hall at Karnak, inner face of the south wall. See also Frankfort, *Kingship*, Fig. 14.

The artistic evidence, considered in isolation, could be the product of distant observation and imaginative composition. Archaeological

evidence from Hierakonpolis, however, brings us to a world in which wild animals were caught, dragged or led to places in or near the town, and there slaughtered. For the artists (and for everyone else), the noise, smells, danger and bloodshed may have been a vivid experience. The evidence comes from two separate sites. At cemetery HK6 (Nagada I–IIB), an elaborate group of graves and associated structures included pit graves for animals, buried singly or in groups (Figure 2.17).[46] The animals included elephants, hippopotamuses, a crocodile, wild bulls (aurochs), a leopard, a hartebeest, baboons, cats, dogs, cattle and goats, thus a mixture of the wild and the tame. This suggests a way of celebrating the supremacy of the ruler over the near-uncontrollable animating force of life. It was a practice which survived at least into the early First Dynasty, for the tomb of King Aha at Abydos incorporated the burials of at least seven mostly young lions.[47]

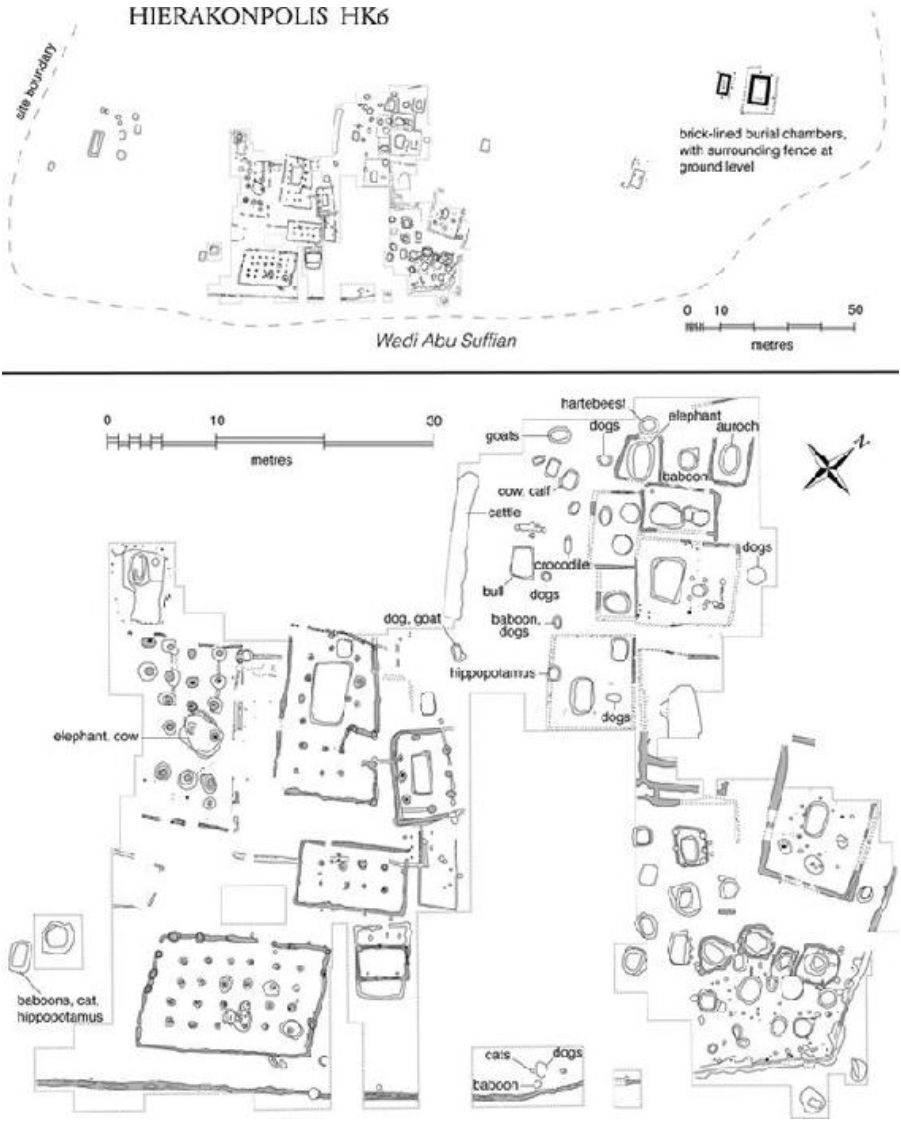


*Figure 2.17*Hierakonpolis locality HK6. *Above*. General map of the site, the central part of which is shown in more detail below. *Below*. The central area of excavation of site HK6. The area to the right is largely occupied by pit graves, many of which had been marked by enclosing fences anchored within narrow trenches. The area to the left, by contrast, contains few burials. Instead the space was largely occupied by roofed buildings constructed of wooden posts and surrounding screens. At the bottom runs a long trench for anchoring a continuous fence that seems to have surrounded the central part of the site. Many of the burial pits were for animals, as labelled. The site was in use over a long time, covering the entire sequence of Nagada phases and on into the Early Dynastic Period. For the location of the site at Hierakonpolis, see Figure 2.8 (p. 77). After Friedman, in Teeter, *Origins*, 37, Fig. 4.6; Friedman, in Patch, *Dawn*, 86, Fig. 17; R. Friedman, *JARCE* 45 (2009), 82, Fig. 3.

The second site (locality HK29A, Figure 3.19, p. 150) takes us to

the heart of the town itself. As will be described in a little more detail in the next chapter (p. 149), an elongated space with curving ends, surfaced with packed mud and given a fixed perimeter, variously of timber and bricks, has proved to be a rich source of finds, many from pits dug around the periphery. Artefacts included flint implements, some of them fine borers for beads, debris from the making or sharpening of flint blades, and many pottery jars, perhaps drinking-vessels. The animal bones, numbered in many thousands, represented cattle, sheep, goats and large fish, but a proportion were from wild and sometimes dangerous animals, amongst them crocodiles, soft-shell turtles, hippopotamuses, gazelles, barbary sheep and various carnivores. Collectively the material suggests butchery and feasting, drawing on animals that were raised and on others that had been caught in the wild. At both Hierakonpolis localities, we are presented with abundant evidence for how the ceremonies that surrounded and supported human rule were reinforced with the drama of subduing and killing animals.

The wall painting in tomb 100 at Hierakonpolis (Nagada IIC phase, *c*. 3400/3300 BC; Figure 2.8, p. 77), located in a separate cemetery, provides a broader context for the struggle to maintain order over unrule. It portrays a symbolic universe in which the central element is a line of boats. This is an early example of the prominent use of the boat as symbol that was to have a long history in Egypt. Some societies (including those of Europe from Roman times onwards) have found in the horse a powerful image of authority, which elevates and almost enshrines the rider. The Egyptians used the boat, often decked out in a distinctive way, to achieve the same effect, sometimes turning it quite literally into a shrine (see below, pp. 248–9). In the Hierakonpolis tomb the boats appear as unassailable points of order and authority, conveying also the sense of passage through time. One of them, with its depiction of a ruler seated beneath an awning and protected by female guardian figures, is specifically associated with rule. On all sides are the threats from manifestations of raw life-force, some as desert animals and others in human form. The threats are countered by vignettes of capture or defeat. The same elemental struggle waged during a perpetual boat-voyage through time lies behind some of the much later scenes painted in the tombs of New Kingdom Pharaohs at Thebes. But by this time fifteen centuries or more of intellectual and artistic development had transformed the simple real landscape of chaos into an imagined Otherworld of dangers represented by invented demons (Figure 2.16). Real wooden

boats also came to be an element of the royal and elite tomb constructions of the Early Dynastic Period (see pp. 98, 100, and Figure 2.14, p. 87).

We are entitled to ask: what was the source of the disorder that made itself felt at this time? The culture of the first settled communities in the eastern Mediterranean and Near East, of far longer duration than the Egyptian Predynastic Period, also expressed, through art and in the remains of feasting, the wild, dangerous, aggressive dimensions of the domain of nature.[48] The Egyptians of the Predynastic Period thus, to some extent, occupied an imaginative world that was common to people over a far wider area, all of whom felt that they lived on the edge of continued existence, never far from being overwhelmed by a world of animate force which was more or less outside their control. The more successful of these communities, the incipient and actual proto-states, had also become engaged in more organized conflicts over territory, the conflicts which would lead to the birth of the Egyptian state. The urgent reality of conflict involving attacks on walled settlements, the horrors of the battlefield and the executions which followed victory were sometimes translated directly into pictorial scenes (Figure 2.18), although the essence of conflict, of disequilibrium, was still viewed in generalized allegorical terms. From the experience of disorder and struggle, the shattering of an earlier equilibrium, arose the perception of a world in conflict, real or potential, between chaos and order. This was to remain a theme of intellectual concern for the rest of Egyptian history. So did the notion that containment (though not ultimate defeat) of disorder and unrule was possible through the rule of kings and the benign presence of a supreme divine force manifested in the powers of heaven, of Horus and of the sun. The intellectual view of the nature of the universe coincided with the structure of political power.

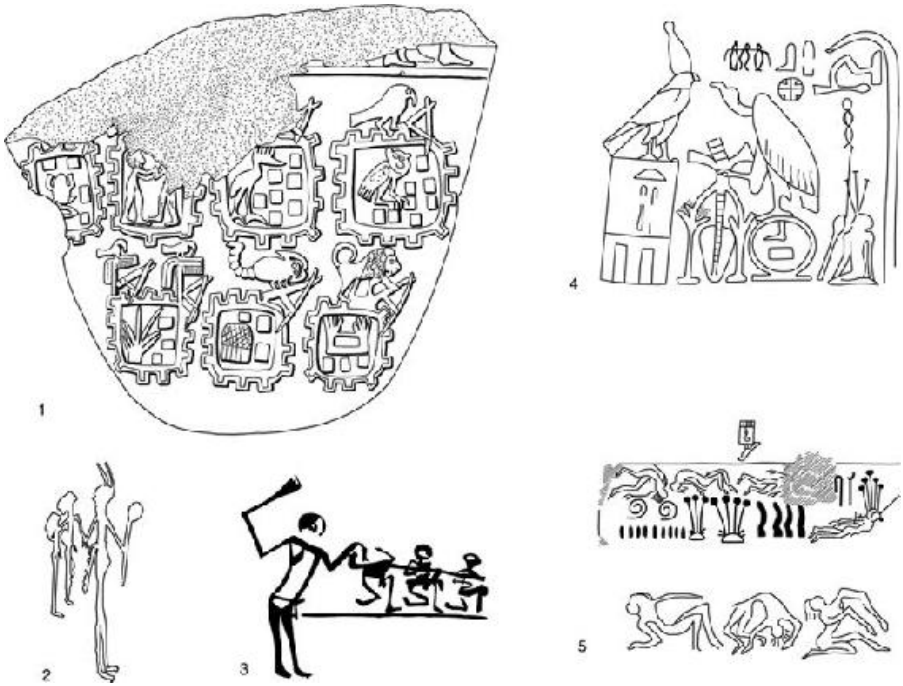


*Figure 2.18*The enforcement of rule. (1) One side of the Tjehenu Palette. The main scene, probably of battle, has been lost. The remaining bottom part shows seven fortified towns being attacked by animals probably symbolizing the monarchy and wielding hoes. The palette presumably celebrated a series of victories in the northward expansion of the kingdom of Hierakonpolis. After Petrie, *Palettes*, Pl. G; Mellink and Filip, *Frühe Stufen*, Taf. 214b. (2) A warrior holds a mace ready to kill a pair of tied enemies, as represented on a painted jar of the Nagada IC phase from Abydos, cemetery U. After G. Dreyer, U. Hartung, T. Hikade, E.C. Köhler, V. Müller and F. Pumpenmeier *MDAIK* 54 (1998), 114, Fig. 13. (3) The scene of a warrior brandishing a mace over a line of bound captives is taken from tomb 100 at Hierakonpolis (Figure 2.8, p. 77), and probably depicts a predynastic king in his role of victor in battle. (4) Incised design on a granite vase inscribed with the name of King Khasekhemui, end of the Second Dynasty, from the Main Deposit at Hierakonpolis. The goddess Nekhbet of El-Kab (her symbol a vulture) grasps both the 'unification' symbol and a circular cartouche containing the name Besh. At the right-hand edge is the 'regnal year' sign and a group of signs reading 'fighting the northerners'. Egyptian Museum, Cairo CG 14724. After Quibell, *Archaic Objects*, Pl. 66 (redrawn by M. Bertram). (5) Incised designs on the base of a seated limestone statue of King Khasekhem from Hierakonpolis. The design shows the bodies of the slain, the plant motif above one symbolizing the north of Egypt, and the numerals 42,209. The name Khasekhem is on the top surface of the base, beside the king's feet; hence its reversal. After Quibell and Petrie, *Hierakonpolis* I, Pl. XL (redrawn by M. Bertram). Both designs seem to record the victory of King Khasekhem/ Khasekhemui over a northern Egyptian population and their ruler, Besh.

The paired animals are always identical. Even on the Narmer Palette they have no distinguishing marks to suggest a wish to identify each one with a part of the country or a separate kingdom. Political

harmony must be there in the meaning, but only as an urgent aspect of the ideal of general harmony in the world that the Egyptians knew. The paired animals are, none the less, the forerunners of the paired figures of Horus and Seth. The former are the symbols of a general statement; the latter represent a more specific application of the concept and its depiction to the new political order of dynastic Egypt. There is an interesting transitional phase to recognize, too. The earliest depictions of paired figures standing explicitly for the unity of two kingdoms are not figures of Horus and Seth, but two facing figures of Horus, in an archaic form that particularly resembles that of Horus of Hierakonpolis (Figure 2.19). This is a straightforward adaptation of the paired identical figures on the slate palettes. It recurs occasionally in historical periods, when the two kingdoms can both be represented as an inheritance from Horus.[49]

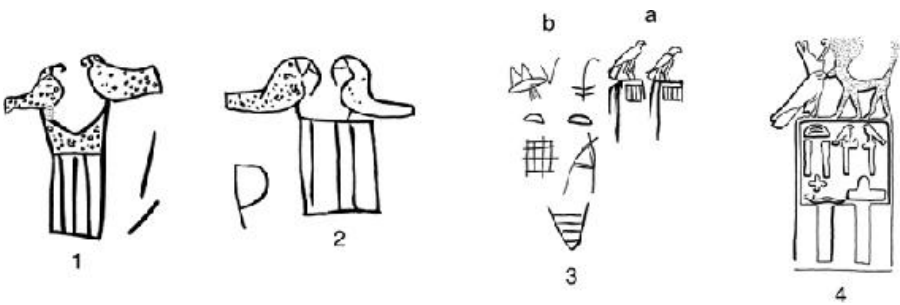


*Figure 2.19*The theme of duality in early royal monograms and names. Nos 1 and 2 (transition to the First Dynasty) are monograms which represent in a simple way a section of royal palace façade, without adding the king's name (cf. Figure 2.9, *inset*, p. 79), surmounted in each case by two Horus figures. After J. Clédat, *ASAE* 13 (1914), Pl. XIII; H. Junker, *Friedhof in Turah*, Vienna, Denkschriften der Kaiserlichen Akademie der Wissenschaften in Wien, 1912, 47, Abb. 58. In no. 3 the same two Horus figures (a) accompany the name of King (Adjib) Mer-pi-bia (b) of the First Dynasty (after Petrie, *Royal Tombs* I, Pl. V.12). No. 4 is a writing of the name of King Khasekhemui of the Second Dynasty in which one of the Horus figures has been replaced by a figure of Seth (compare Figure 2.3, p. 67). After J. Capart, *Memphis à l'ombre des pyramides*, Brussels, Vromant, 1930, 119, Fig. 116.

The cosmic balancing act was not, by itself, enough. Egyptian society of the dynastic period was strongly hierarchical. Harmony within the state – through the threat of sanction – flowed down from a single source, the king, through loyal officials to the people. The king's role of maintainer of order was paramount. It covered not only responsibility for justice and piety but also the conquest of unrule. The philosophical texts of the Middle Kingdom depict unrule not only in terms of social upheaval, but also natural and cosmic catastrophe. The final guarantee of harmony in society and in the natural order was not

a balancing of opposites. One force had to be superior. We can glimpse this already in one of the vignettes in Hierakonpolis tomb 100 (Figure 2.15, *top right*, p. 91). Here the two paired and facing animals (lions in this case) are held apart and balanced by the central figure of a ruler. The introduction of Seth enabled this to be reflected in the broader structure of knowledge, and to understand this we must remember that each king was also a particular embodiment of Horus. And so Seth becomes the loser, and the antagonist to Horus. He becomes the antagonist to order on a grand scale: celestial disturbance in the form of storms, the hostile nature of the surrounding deserts, the exotic character of foreign gods, even red-headed people – these were expressions of Seth. Yet, as the Shabaka Stone tells us, Seth also acquiesces in the divine judgement against him. He retains the power to be a reconciled force in the ideal balance of harmony.

The myth of Horus and Seth is not a reflection of how the Egyptian state emerged politically. The details of the period of internal warfare among the proto-states of the Nile valley are unlikely ever to be known, but we can safely assume that it was not a simple epic struggle between two protagonists. The myth of the state in historic times was a clever transformation of an earlier, more generalized statement of an ideal world originating in Upper Egypt. It combined the old concept of an ultimate harmony through balanced opposites with the newly perceived need for a single superior force. It was created as part of the great codification of court culture. It drew upon local traditions of knowledge, which in the case of Horus and Seth were centred in Upper Egypt. It became part of the long active interest that the Egyptians maintained in symbolic geography; in effect, a process of internal colonization at an intellectual level.

There is a broader dimension within which to consider this theme. Much later the Middle East became home to a philosophical tradition of dualism, which imagined a perpetual conflict between a good and an evil force in the universe, between light and darkness. It saw the material world as evil and urged the individual to struggle to overcome its superficial attractiveness, and to seek a path of separation from worldliness. Through orthodox Christianity and various alternative forms of essential knowledge ('heresies' is an unfair word for them) the idea rooted itself very firmly in Egypt (it is well represented in Gnostic literature of the early centuries AD) and it has had a profound influence upon European understanding. In the material discussed in this section we seem to see the ancient Egyptians facing up to the same philosophical challenge – the source of discord

and chaos – but giving it a more optimistic and less personally troublesome resolution. Ultimately the struggle was waged externally by divine proxies on behalf of the people, although in the foreground king and people were obligated to heed the ordering concept of *maat* in their lives. A harmonious outcome was held to be within reach.

One further observation needs to be made. The First Dynasty began as a state that was territorially as large as most that were to occupy the lower Nile valley until modern times. There was no long process of growth from a spread of city-states, a common early political form that had a thriving history in, for example, Mesopotamia. The organizational or political units that had developed earlier cannot have matched the complexity of city-states as they developed in other parts of the Near East. I have used the term 'proto-state' for them ('incipient city-state' is an alternative term). We can be fairly sure of two (Nagada and Hierakonpolis), and we can suspect that there were others at various stages of development (Figure 2.5, p. 73, marks some of them where there is archaeological evidence). The internal warfare pursued most vigorously from the south terminated this polycentric period of political growth, but as states everywhere discover sooner or later, regional assertion remains a powerful force even when its centres are submerged within a larger polity. The game goes on.

Foundations of ideology (3): architecture as political statement

The unification myth was but one aspect of what emerges with the First Dynasty as the principal focus of both intellectual and organizational effort: the projection of kingship as the symbol of power supreme over all others. On the late predynastic slate palettes conquering figures occur in the form of animals (a lion, a bull, a scorpion, a falcon; see Figure 2.18 (1), p. 95) that we can take to be symbols of human power, perhaps of a king. But it is only with the Narmer Palette that we find figures of human kings to which detailed treatment has been given in order to convey some of their symbolic attributes. When we turn to architecture we find an equivalent process but on a far grander scale. The royal tomb became the principal public statement on the nature of kingship. Changes in royal tomb architecture are thus our most important single guide to the evolution of ancient perceptions of monarchy. Those perceptions seem at this stage to have given significantly greater prominence to the king than

to the gods (something mirrored at the level of the patriarchal leaders of local communities). And the architecture presupposes, from the reign of King Aha onwards from near the beginning of the First Dynasty, an equally great enhancement of the drama of the royal burial, involving the sacrifice of human life and the devotion of much labour.

Nagada and Hierakonpolis have provided us with tombs that, by their size, sometimes by brick linings, sometimes by the presence of accompanying subsidiary burials and, in the case of Hierakonpolis tomb 100, wall paintings, imply ownership by leaders of more than just a local community, by men in that hazy category of kings who are not yet of the authoritative reach of those of the dynasties of Pharaohs to come. By those later standards their tombs are, none the less, relatively modest constructions (on their superstructures more will be said below). The First Dynasty brought substantial change. Against a background of increased tomb size throughout the country, reflecting the increased wealth and organization of the Early Dynastic state (though much of it often still focused on the tombs of provincial patriarchal clan leaders), we find the builders of the royal tomb developing steadily in the direction of monumental scale and distinctive architectural symbolism in more durable materials. The effect must have been a change in the tempo of life for those who lived within the ambit of the court. The hugely increased scale of expenditure and thus of obligation must have created a more marked punctuation of time – the death of the king the end of an era – than had previously existed.[50] One form that this marking of time took was the inclusion within the royal burial layouts of the burials of people assumed to be retainers who seem (although some ambiguity still surrounds the evidence) to have been executed at the time. It is estimated that, by the end of the First Dynasty, nearly 2,000 individuals had met this end.

The centre of this drama was Abydos and the tombs of the kings of the First Dynasty (and of the last two of the Second) who were buried in the part known as the Umm el-Qaʾab (Figure 2.14, p. 87). The royal tombs consisted of brick chambers constructed in large pits dug into the desert, covered probably by a simple superstructure in the form of a plain square enclosure filled to the top with sand and gravel. Their royal ownership was proclaimed by pairs of free-standing stone slabs (or stelae) bearing the Horus name of the king in question (an example is Figure 2.9, *inset*, p. 79). For each king, a separate and more conspicuous building was also constructed closer to the edge of the

floodplain, and just behind the site of the ancient town of Abydos (Figure 2.14, p. 87). The best preserved is the last, from the end of the Second Dynasty, the Shunet el-Zebib, belonging to King Khasekhemui (Photograph 2.1).[51] The Shunet el-Zebib is an enclosure measuring 122 × 65 m externally, surrounded by a double wall of mud brick, pierced by doorways. The inner wall, still standing in places to a height of 11 m, is a massive 5.50 m thick. On its outer surfaces it was decorated with niches to give a panelled effect. The panelled façade on the long side facing the cultivation was emphasized by the insertion at regular intervals of an inner, deeper niche. A small part of the interior of the enclosure was occupied by a free-standing building near the east corner. This contained a suite of rooms in some of which pottery storage jars had been stowed. The outer faces of this building had been decorated in the same panelled style as the great enclosure wall (Figure 2.20 (A)). The earlier counterparts of the Shunet el-Zebib, in a closely set group, show no signs of their existence above the present ground level, each having apparently been demolished at some time after the funeral had taken place. This would have left the tomb itself, on the Umm el-Qaʾab, as the place of permanent cult. Along the side of one of the enclosures a row of 14 wooden boats had been buried, about 25 m long but only about 50 cm high, encased in mud and bricks. They have individual counterparts in boats buried alongside the tombs of courtiers of the Early Dynastic Period at Saqqara and Helwan, and presumably represent a continuation of the theme of the perpetual voyage by the upholder of authority that is so strikingly portrayed in tomb 100 at Hierakonpolis and here has the scale of a small fleet.

*Photograph 2.1*Early royal architecture: the Shunet el-Zebib at Abydos, mud-brick funerary palace of King Khasekhemui of the Second Dynasty (*c*. 2611–2584 BC), looking south-east.

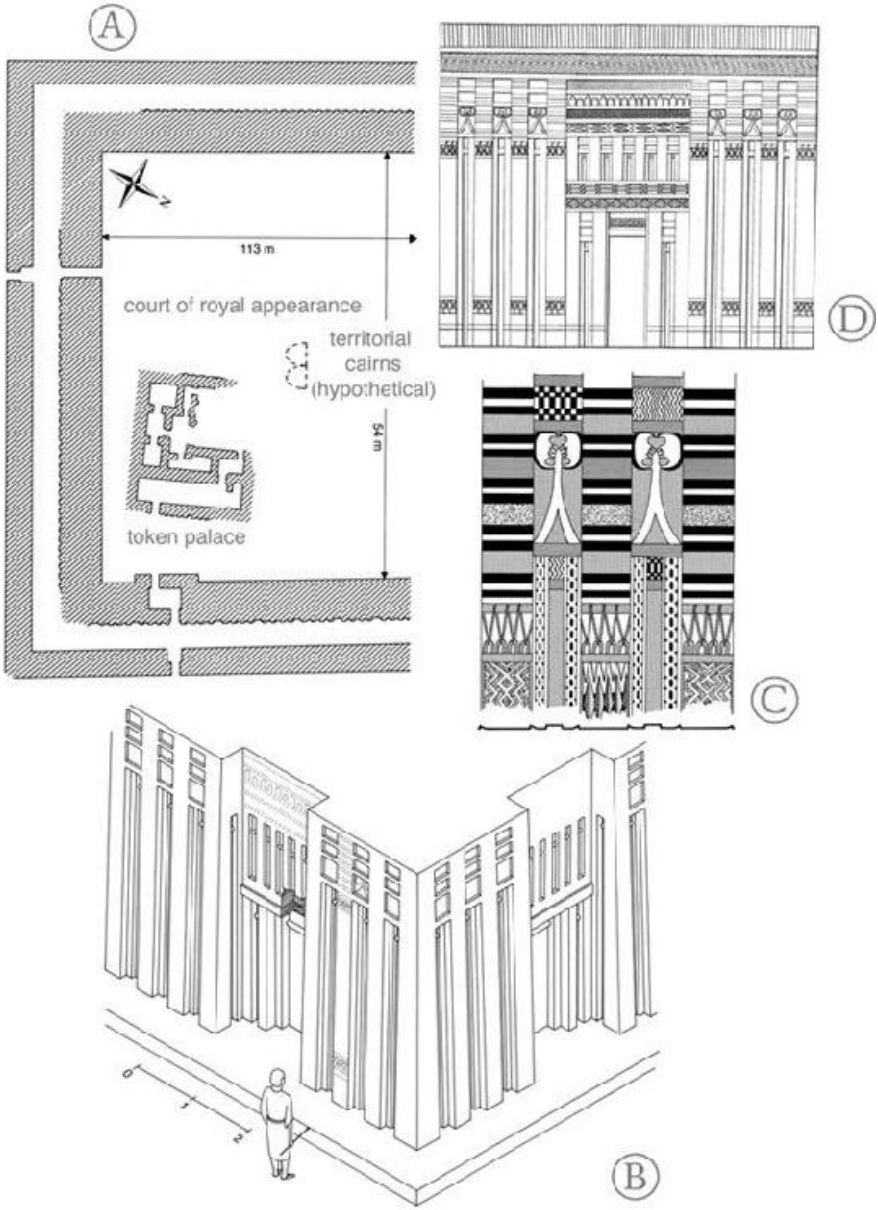


*Figure 2.20*The royal style of architecture in the Early Dynastic Period. (A) South-east sector of the Shunet el-Zebib at Abydos (see Photograph 2.1; reign of Khasekhemui, late Second Dynasty). The position of the territorial cairns is hypothetical. After Ayrton et al., *Abydos* III, Pl. VI. Note the simplified 'palace-façade' niched style of brickwork on external surfaces. For a section of real (as distinct from funerary) palace wall see Figure 2.9 (p. 79), from Hierakonpolis. (B) Reconstruction of part of the façade of a First Dynasty court tomb, reproducing in miniature the 'palace-façade' architecture of court buildings. (C) The reconstruction of the elaborate designs – largely painted – on the upper parts is based on later reproductions on sarcophagi and tomb-chapel offering-places. This example derives from the Fifth Dynasty tomb of Tepemankh at Abusir, after J. Capart, *L'art égyptien I:*

L'architecture, Brussels and Paris, Vromant, 1922, Pl. 46, itself derived from L. Borchardt, *Das Grabdenkmal des Königs Ne-user-re*', Leipzig, Hinrichs, 1907, Taf. 24. (D) A further example, a carved Fourth Dynasty sarcophagus from Giza, tomb of Fefi, after S. Hassan, *Excavations at Gîza (1929–1930)*, Cairo, Faculty of Arts and Oxford, OUP, 1932, Pl. LXV.

Two paths lead us towards the meaning of this building and its companions. One concerns the panelled effect on the outer walls. The most striking examples occur on the façades of large tombs of the Early Dynastic Period (Figure 2.20 (B)), mostly in the Memphite area (although one is at Nagada). Some examples preserve the lower part of elaborate painted designs, which reproduce in great detail a way of further decorating the walls: by draping over them long strips of brightly coloured matting lashed to horizontal poles. These panelled surfaces were broken by deep recesses with similarly panelled sides, and at the back of each recess stood a broader niche, painted red, apparently to signify the wooden leaf of a door. The whole design of panels, recesses and applied matting patterns became a fixed scheme of decoration on later sarcophagi and offering-places in tomb chapels, and these supply us with the details missing from the upper parts of the Early Dynastic tombs (Figure 2.20 (C), (D)).

The design occurs in another context, too. A narrow section of it formed the basis for the heraldic device (the *serekh*) in which the Horus name (the principal name) of Early Dynastic kings was written (Figure 2.9, *inset*, p. 79). From this it was long ago deduced that the architectural style belonged specifically to the royal palace. Scholars coined the term 'palace façade' for the architectural style. It was only in 1969, however, that an actual stretch of wall decorated in this style was found which was not part of a tomb. It lay in the centre of the Early Dynastic town of Hierakonpolis, and formed the gatehouse for what is evidently an Early Dynastic palace, the one briefly described in an earlier section (Figures 2.8 and 2.9, pp. 77 and 79). The Hierakonpolis gatehouse, the Shunet el-Zebib and the frame around the king's Horus name reveal that the Early Dynastic kings adopted the niched and decorated façade as a symbol of power. It denoted by itself the idea of 'palace' as a ruling entity, and for those who were part of the court – the palace elite surrounding the king and administering his power – it was permissible to use a scaled-down version to decorate their own tombs, advertising that they, too, shared in the rule of Egypt.

For the second path we must turn to a monument which in time is only a generation later than the Shunet el-Zebib, but which belongs to

another plane of architectural achievement: the Step Pyramid at Saqqara, tomb of Djoser, the first king of the Third Dynasty (*c*. 2584–2565 BC) (Figure 2.21).[52] It is the first building of truly monumental scale in Egypt to have been constructed throughout of stone.[53] In its detailing it also contains many of the basic decorative motifs that came to characterize Pharaonic architecture. It represents, in architecture, a major act of codification of forms such as had occurred in art around the beginning of the First Dynasty.

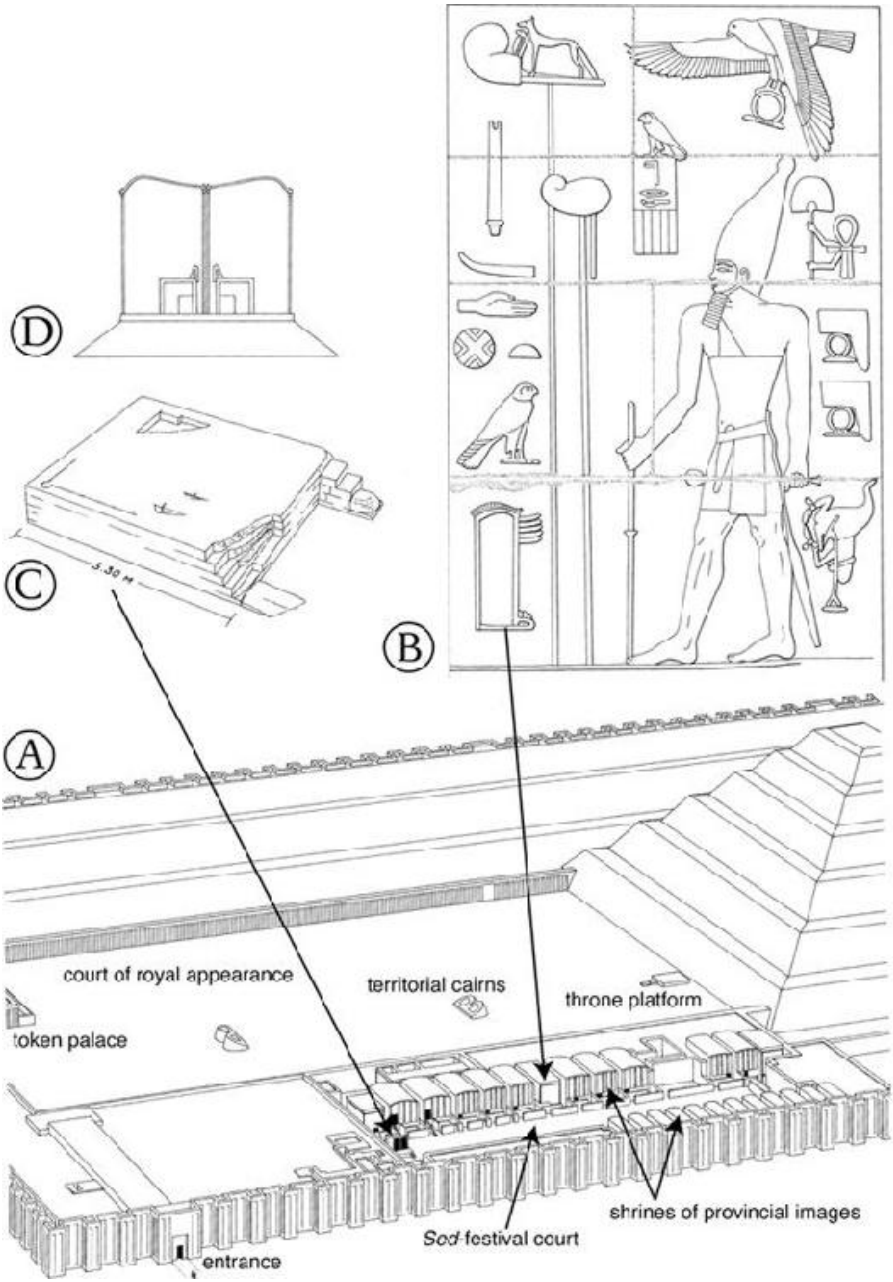


*Figure 2.21*Political architecture. (A) Reconstruction of the southern part of the Step Pyramid of King Djoser at Saqqara, eternal plaza of royal display and setting for the *Sed*-festival (see also Photograph 2.2, p. 105), after Lauer, *La pyramide*, Pl. IV. (B) Scene of King Djoser proceeding to visit the temporary shrine of Horus of Behdet. The column of hieroglyphs in front of the king reads: 'Halting (at) the shrine of Horus of Behdet.' The last sign is actually a picture of a temporary shrine of the kind modelled in stone around the *Sed*-festival court at the Step Pyramid. Note that Djoser wears the crown of Upper Egypt. Northern stela beneath the Step Pyramid at Saqqara, after Firth and Quibell, *Step Pyramid*, Pl. 17, and A. Gardiner, *JEA* 30

(1944), Pl. III.4. (C) Stone platform with double staircase as found at the southern end of the *Sed*-festival court in the Step Pyramid (see also Photograph 2.2, p. 105), Lauer, *La pyramide*, Pl. LVI.1 and p. 145, Fig. 146. (D) Ancient representation of the double throne dais with canopy as used at the *Sed*-festival, based on a carved lintel of King Senusret III (Twelfth Dynasty), as reproduced in K. Lange and M. Hirmer, *Egypt: Architecture, Sculpture, Painting in Three Thousand Years*, 3rd edn, London, Phaidon, 1961, 103, 104.

The Step Pyramid confronts us with a problem of interpretation. It has many distinctive parts, each of which must have held a particular meaning. However, very little of it bore any figured or written decoration to declare its meaning explicitly. For much of it we have to rely upon interpretations derived from later sources, principally the Pyramid Texts (collections of short prayers and statements carved inside the burial chambers of pyramids from the end of the Fifth Dynasty onwards, thus three centuries later, and the first body of significant written knowledge to have survived from ancient Egypt). By this time, however, pyramid layouts had changed, and so, too, must have the meanings of the various parts. There is thus, for example, no straightforward answer to the basic question: why a stepped pyramid? By the time of the Pyramid Texts the true pyramid had long replaced it, and so, presumably, had a different meaning. This made a strong link between the pyramid shape and the cult of the sun (as the sun god Ra) centred at Heliopolis (Figure 3.14, p. 142). By a common modern explanation, the plain mounds which stood over early tombs and were, in the Early Dynastic Period, turned into plain brick rectangles, evolved into the square plain block of stone masonry which at first covered Djoser's tomb and over which the Step Pyramid was then erected. Similar mounds are known to have been incorporated invisibly into the palace-façade superstructures of court tombs at Saqqara. For explanation, one can turn to a rich tradition of later times that made earth mounds into symbols of creation and rebirth. Possible playful ways (modern and ancient) of working with this imagery will be explored further in the next chapter (see especially Figure 3.23, p. 157). The temptation is accordingly there to see the final stage of the Step Pyramid as an inspired design idea which created a vision of a heavenly staircase from a series of superimposed stone mounds of diminishing size.

Fortunately, not all of this amazing monument is mute. Djoser's stepped pyramid stands at the centre of a rectangular enclosure, 278 × 545 m (Figure 2.21). It was surrounded by a thick stone wall with external towers, the façade carved with a simpler, modified version of the palace-façade style, although each tower was treated as if it were a

gateway with closed door leaves imitated in stone. The one true entrance is at the south-east corner, and in the general design of the whole complex we can still recognize the basic shape of the Shunet el-Zebib at Abydos. Across the centre of the enclosure extends a huge open inner space, a rectangle measuring 108 ×187 m, faced by panelled walls. At each end stood originally a pair of stone horseshoe-shaped cairns, and immediately in front of the pyramid a stone platform reached by steps faced the alignment of the cairns. This arrangement of cairns and stepped platform is known pictorially from Early Dynastic carvings. In one of them, on a mace head of the reign of Narmer (Figure 2.22 (G)), we can see that the arrangement appears to be in use for reviewing the livestock and prisoners captured in a battle. In another, a label of the reign of the First Dynasty King Den, the king appears twice: once on the stepped throne beneath an awning, and once on the arena running or striding between the groups of cairns (Figure 2.22 (F)). This latter element is one of two subjects of scenes actually carved within the Step Pyramid complex itself, in underground corridors beneath the Southern Tomb and the pyramid proper (two of them are depicted in Figure 2.21 (B) and Figure 2.22 (E), pp. 101, 103).[54] Two groups of three carved panels occur at the backs of imitation doorways. Some of the panels show Djoser performing this very ceremony of striding or running between the cairns, accompanied by other symbols. The shape of the cairns can be clarified by later references, as can one of the prominent groups of symbols. They are markers of territorial limits. Later sources also tell us that the arena itself was called simply 'the field', and that the ceremony was termed either 'encompassing the field' or 'presenting the field', with the emphasis then on the dedication of the arena to a god, although this element is not apparent from the early depictions.

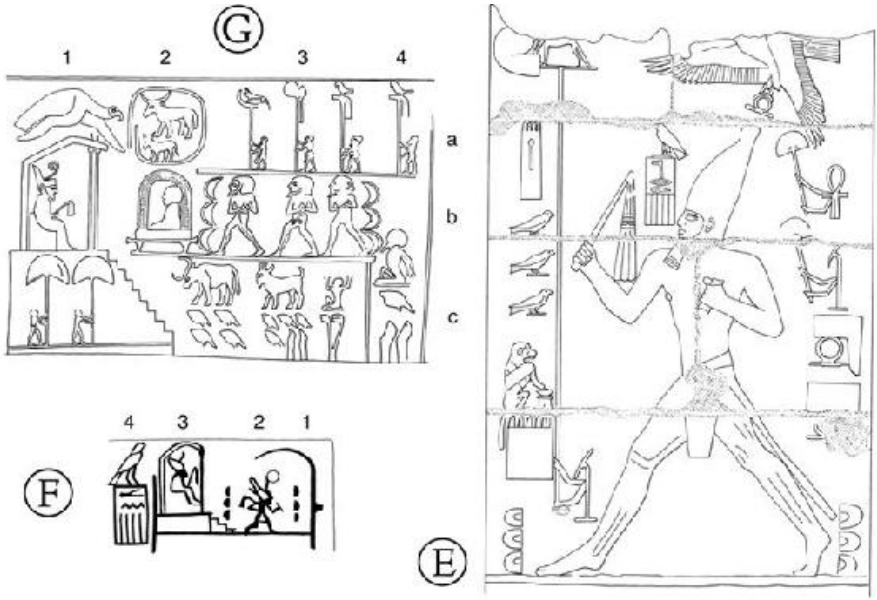


*Figure 2.22*A demonstration of territorial claim. (E) Scene of King Djoser running (or striding) across the ceremonial arena between the two sets of territorial marker cairns. In front of the king is the standard of the canine god Wepwawet, and a vertical column of hieroglyphs, the meaning of which is obscure. The literal translation is 'The Great White Ones', a plural reference to a baboon god whose picture forms part of the last hieroglyph. The first element in the name, however, is also a word for a shrine, evidently a 'White Shrine'. It has been suggested that the baboons in question might be images of ancestral spirits. Behind the king is a pair of symbols used to write a word (*mdnbw*) meaning 'limits'. Central stela beneath the Step Pyramid at Saqqara, after Firth and Quibell, *Step Pyramid*, Pl. 16. (F). Part of a wooden label of King Den of the First Dynasty from his tomb at Abydos, to be read from right to left: (1) the sign for 'regnal year' (see also Figures 2.2 and 2.18 (4), pp. 62 and 95); (2) the king running between the territorial cairns; (3) the king appearing seated beneath a canopy upon a stepped throne dais; (4) Horus name of King Den. After Petrie, *Royal Tombs* I, Pls XI.14, XV.16. (G) Part of a scene from a ceremonial mace head of King Narmer, First Dynasty, from Hierakonpolis. It depicts a ceremonial appearance of the king on the stepped and canopied throne dais (1), accompanied by bearers of the 'Followers of Horus' standards (3a, see also Figure 2.10, p. 81). The occasion is evidently the review of prisoners (2b–4b, 4c) and animals (2a, 3c) captured in battle. The many small signs in line 'c' are numerals. Note the seated figure (divine image?; 2b) in a portable carrying-chair with curved canopy (see also Figure 3.17 (4), p. 147). Note how the human captives are paraded between the territorial cairns: the court of royal appearance has become a victory parade-ground. After Quibell and Petrie, *Hierakonpolis* I, Pl. XXVI.B.

One of the general needs of monarchy (and of other forms of state leadership) is theatrical performance to reinforce deference: a formal setting for the display of the leader in person, either to the public at large or to select representatives. In later times the Egyptian sources make much of the 'appearance of the king', and we should anticipate that each age sought a dramatic setting for this moment, built around

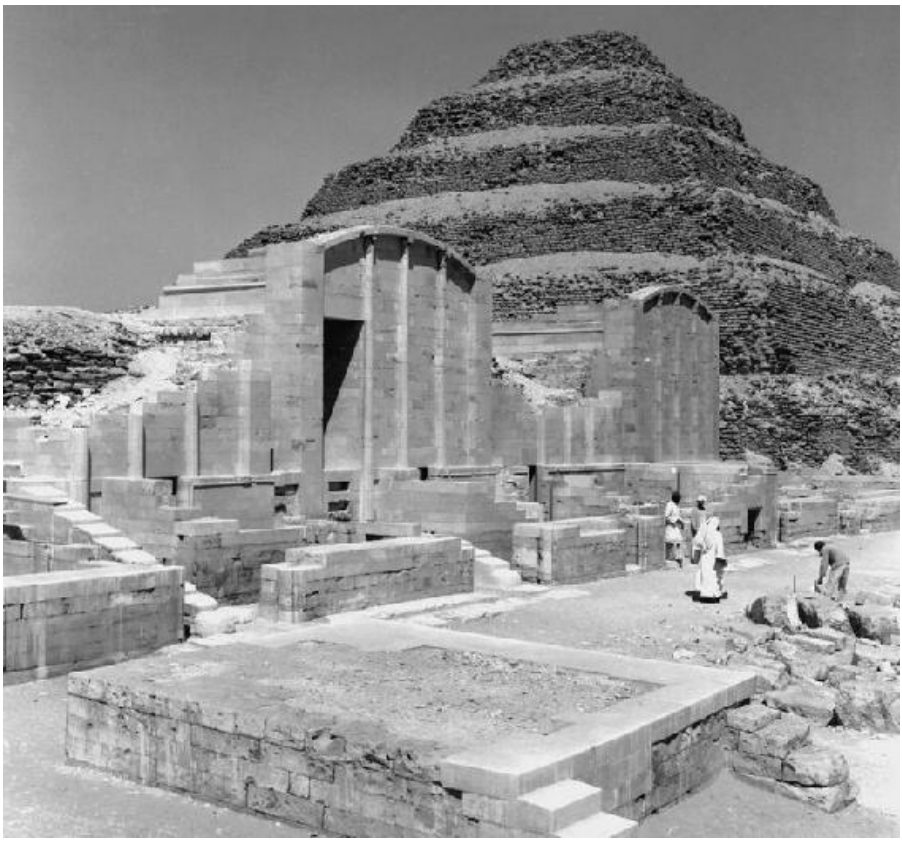
certain basic elements: an open space for assembly, an elevated place where the king could be seen within a formal framing, and a token palace where robing and resting could comfortably and privately take place. In Chapters 6 and 8, pp. 267–8, 270 and 337–8, the elaborate devices adopted by the New Kingdom Pharaohs for displaying themselves will be described and we shall find settings of just this kind. The early sources, both pictorial and architectural, also combine to satisfy this demand. We are prompted to imagine that an important part of an Early Dynastic king's palace was an enclosed arena or plaza, equipped (at one end) with cairns which symbolized territorial limits and with an elevated throne dais shaded by a canopy of distinctive shape (this latter element present already in one of the boats in Hierakonpolis tomb 100), and a token palace perhaps placed separately. It was used as the setting for major royal occasions, such as the reception of tribute, of captive people and of captured animals, and for a particular ceremony in which the king laid claim to his territory by striding forcefully around its symbolic limits. The Shunet el-Zebib at Abydos and the great plaza in front of the Step Pyramid are replicas at full (if not exaggerated) scale that provided the king with the necessary setting for his own pageantry for the eternity of death. One might identify a less developed example (with as yet no trace of the cairns) in the courtyard with panelled dais in the Hierakonpolis palace (Figure 2.9, p. 79).

This is not the end of the story. There is another element to the staged public appearances of kings at this time: a periodic celebration termed the *Sed*-festival by the Egyptians. Sources from early times onwards make the *Sed*-festival a jubilee celebration of the king's earthly rule over a period that came in time to be seen as ideally of 30 years, although second and third celebrations could subsequently take place at shorter intervals and 30 years was not an invariable rule (in Figure 3.1, p. 113, King Menthuhetep IV's first *Sed*-festival is recorded as having been celebrated in only his second regnal year). The way that the festival was conducted changed over time, and so, probably, did the meaning. It is tempting when dealing with Egyptian culture to combine sources from all periods in order to create a comprehensive explanation for a particular theme because the pictorial forms tended to remain constant. But continuity of forms masked changes in meaning and practice. Inventing traditions was something that the Egyptians were very good at. For each period the sources should be interpreted within the spirit and for the illumination of that age alone. (In Chapter 6, pp. 270–5, we shall examine one particular set, those of

Amenhetep III of the Eighteenth Dynasty.) Two aspects seem more than any other to have characterized the *Sed*-festival. The king, often wearing a distinctive robe, sits on a special dais provided with two thrones for an appearance as King of Upper Egypt and of Lower Egypt. The thrones are normally shown back to back (Figure 2.21 (D), p. 101), but this may be an artistic device for rendering a pair which were actually side by side.[55] More elaborate scenes, later than the Early Dynastic Period, give as the setting for this ceremony a series of shrines pictured as constructions of wood and matting. The origin and meaning of this style of architecture will be explored in the next chapter. In these scenes one design stood for Lower Egypt and one for Upper Egypt. Sometimes they were specifically for the cobra goddess Wadjit of the delta town of Buto, and of the vulture goddess Nekhbet of El-Kab in the south. But they were for other deities as well. This gathering of provincial images of gods and goddesses in a series of temporary shrines beside the double throne of the king was a gesture of provincial homage to the person of the king. The other element specifically associated with the festival after the Third Dynasty is the ceremony of laying claim to the 'field' by striding around the cairns. At some time, therefore, this separate and presumably more frequent ceremony was absorbed into the pageantry of the *Sed*-festival.

Again the Step Pyramid clarifies the picture. Beside the great arena with cairns is another but quite separate part of the complex. This runs along the east side of the main enclosure and consists of a series of mostly solid, dummy buildings arranged along both sides of a court (Photograph 2.2). They have a distinctive appearance: a series of small rectangular structures, with exterior detailing which creates in solid, full-scale, three-dimensional architecture the shapes of the temporary shrines which were envisaged as constructed of timber and matting. They are, in fact, representations of the very kind of buildings which later scenes show gathered for the *Sed*-festival. This seems to be their meaning at the Step Pyramid, too. For at one end of the court is a square throne dais with two flights of steps, originally covered with a little stone building (Figure 2.21 (C), p. 101). It is hard to escape the conclusion that this was a rendering in stone for eternity of the double-throne dais covered with special canopy, and that this part of the Step Pyramid complex gave King Djoser the eternal setting for the periodic *Sed*-festival. Scenes of the king visiting the various shrines form the other subject of the carved panels in the underground galleries (Figure 2.21 (B) p. 101). The subject of shrines – accommodation for gods – has so far barely been touched upon. This

in itself reflects what appears to have been the order of priority in the thinking of these times: celebrating human leaders attracted more resources than finding homes for gods. It forms an important part of the next chapter.



*Photograph 2.2*The Step Pyramid of King Djoser, Third Dynasty, at Saqqara, looking north-west. In front of the pyramid are the renderings into stone of the tent shrines erected on pedestals, forming part of the *Sed*-festival court. Note the probable double-throne platform in the foreground.

We can now appreciate better the meaning of the architecture of early royal tombs, of which the Step Pyramid is the most complete and elaborate. They provided an arena for the eternal pageantry of kingship as it was experienced on earth: the king as supreme territorial claimant, protected within his distinctive palace enclosure, the focus of staged actions centred on his person.

With the Fourth Dynasty the form of the royal tomb changed dramatically. The stepped pyramid became a true pyramid, and instead of occupying the middle ground of a great complex of other buildings, it towered at the end of a linear architectural sequence

which stretched down to the edge of the alluvial plain (Figure 2.23). The great enclosed arena or plaza of the royal appearance and the special *Sed*-festival architecture all vanish. In their place comes a temple intended primarily for an offering-cult for the king's spirit via an offering-place on the east side of the pyramid, and via a group of statues. These elements had been present in Djoser's complex, but now they were dominant. *Sed*-festival scenes occur on walls, but alongside other themes. The true pyramid was a symbol of the sun (another aspect of the great codification discussed in the next chapter), and there is other evidence from the Fourth, and especially the Fifth Dynasty to show that serious intellectual consideration was paying more attention to the power of the sun as the supreme force. The prominent title of kings, 'Son of Ra', appears first at this time. The Fourth Dynasty and later pyramids convey a new image of kingship. Gone is the raw power of a supreme territorial ruler. The king is now sublimated into a manifestation of the sun god. Architecture conveyed this fundamental reappraisal to the maximum effect.

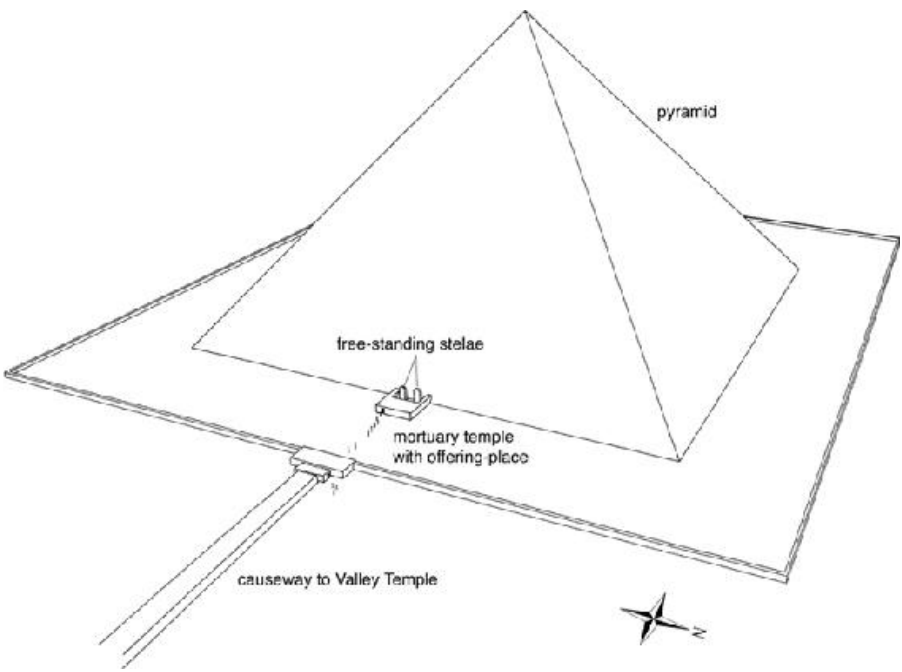


*Figure 2.23*The apotheosis of kingship. The pyramid of Medum (reign of King Sneferu, *c*. 2520–2470 BC) was the first of the new generation of pyramid tombs which conveyed a radically different view of the nature of the monarchy. In place of a tomb which celebrated the king as supreme territorial claimant and perpetuated his earthly pageantry (Figure 2.21, p. 101), the new-style pyramids proclaimed his absorption into the mystic symbol of the sun. The tiny offering-temple was the principal gesture to his human aspect. Later pyramid complexes softened this stark

contrast in scale between pyramid and temples.

The social and economic climate in which the early Egyptian state arose still remains sketchily documented. We can recognize as a general background a relatively egalitarian farming society settled in low-density villages and larger settlement areas spread through the Nile valley and delta during the fourth millennium BC. Local identities and community leaders emerged, but at a pace and on a scale which varied from place to place. Inherent in the nature of the process was that local variations that were initially quite small were amplified on an ever-increasing scale. This became an exponential rate of growth for the most successful, which culminated in a single state (whose rulers formed Dynasty 0) before the end of the Predynastic Period. Those involved in this final phase of dynamic growth and terminal competition already perceived the consequences of power on a grand scale and codified its expression in distinctive intellectual form. This cleverly fused together a generalized concept – the superiority of a locally derived order over a universal chaos – and the position of a single king whose power as earthly territorial ruler was expressed in monumental architecture, in public performances, and in symbolic art. As a set of ideas and ideals for legitimizing the rule of a king over his subjects it was to survive the ups and downs of political history for three thousand years. It also left the Egyptians incapable of visualizing the polycentric pattern of their own early political growth. Whenever political fragmentation reappeared it seemed to be a fall from the original ideal yet (as we can now see) quite mythical state of things. And as the next chapter will show, a parallel erection of a myth-world shut the Egyptians off from their cultural beginnings.

Notes

1 In general see D.B. Redford, *Pharaonic King-lists, Annals and Day-books: a Contribution to the Study of the Egyptian Sense of History*, Mississauga, ON, Benben, 1986; D. Wildung, *Rolle*; Yasmin El Shazly, 'Representations of sequences of royal ancestors in Deir el-Medina tombs.' In J. Toivari-Viitala, T. Vartiainen and S. Uvanto, eds, *Deir el-Medina Studies*, 65–86.

2 Now in the Egyptian Museum, Cairo, CG34516; Sir A.H. Gardiner, *Egypt of the Pharaohs*, Oxford, OUP, 1961, 49, fig. 8; https://pharaoh.se/saqqara-king-list.

3 Arnold, *Tempel Mentuhotep*, 92–5.

4 Wilkinson, *Annals*; Strudwick, *Texts*, 65–74. For a similar basalt slab inscribed with detailed royal annals of the Sixth Dynasty, see M. Baud and V. Dobrev, *BIFAO* 95 (1995), 23–63; Strudwick, *Texts*, 75–7.

5 Sir A.H. Gardiner, *The Royal Canon of Turin*, Oxford, GI, 1959; J. Malek, *JEA* 68 (1982), 93–106; Ryholt, *Political Situation*, 9–33; K. Ryholt, *ZÄS* 127 (2000), 87–100; D. Franke, *JEH* 1 (2) (2008), 267–87.

6 Ryholt, *Political Situation*, 24–5 logically places several small fragments here which then gives us a list of demi-gods and legendary heroes who include 'He who possesses noble women' and 'The follower Meni great of height'.

7 Pritchard, *Texts*, 12; www.ucl.ac.uk/museums-static/digitalegypt/literature/isisandra.html.

8 The tale is preserved in P. Chester Beatty I, in the British Museum, written in the reign of Rameses V, *c*. 1146–1141 bc. See A.H. Gardiner, *The Library of A. Chester Beatty: Description of a Hieratic Papyrus with a Mythological Story, Love-songs, and other Miscellaneous Texts*, London, OUP, 1931; D. Sweeney, *JEA* 88 (2002), 141–62. There are small fragments of a Middle Kingdom version, Parkinson, *Voices*, 120–1. For the private library in which it was found see McDowell, *Village Life*, 134–5.

9 Sneferu's later reputation: B. Gunn, *JEA* 12 (1926), 250–1; G. Posener, *Littérature et politique dans l'Égypte de la XIIe dynastie*, Paris, Champion, 1956, 31–3; D. Wildung, *Rolle*, 104–52. P. Westcar is translated in Lichtheim, *Literature* I, 215–22.

10 Peden, *Ramesses IV*, 93; Kitchen, *Ramesside Inscriptions* IV, 19; Kitchen, *Ramesside Inscriptions (Trans)* IV, 20–1.

11 Lichtheim, *Literature* I, 215–22 (P. Westcar); Herodotus II, 124–7; Waddell, *Manetho*, 47, 49.

12 Parkinson, *Voices*, 54–6.

13 Lichtheim, *Literature* I, 149–63; Parkinson, *Poetry and Culture*, 204–16.

14 Waddell, *Manetho*, 61, 62.

15 Lichtheim, *Literature* I, 139–45; Parkinson, *Poetry and Culture*, 200–4.

16 Speos Artemidos text: D.B. Redford, 'Textual sources for the Hyksos Period.' In E. Oren, ed., *The Hyksos: New Historical and Archaeological Perspectives*, Philadelphia, PA, The University Museum, University of Pennsylvania, 1997, 1–44; J.P. Allen, *Bulletin of the Egyptological Seminar* (New York) 16 (2002), 1–17.

17 Simpson, *Literature*, 339–44.

18 Lichtheim, *Literature* I, 51–7; III, 4–5; B.G. Ockinga, 'The Memphite Theology – its purpose and date.' In A. Woods, A. McFarlane and S. Binder, eds, *Egyptian Culture and Society: Studies in Honour of Naguib Kanawati* 2, Cairo, Conseil Suprême des Antiquités de l'Égypte, 2010, 99–117. R. Krauss, 'Wie jung ist die memphitische Philosophie auf dem Shabaqo-Stein?' In E. Teeter and J. A. Larson, eds, *Gold of Praise: Studies on Ancient Egypt in Honor of Edward F. Wente*, Chicago, IL, UCP, 1999, 239–46 argues for a Ptolemaic date.

19 A.H. Gardiner, *Ancient Egyptian Onomastica*, London, OUP, 1947.

20 Cited in Frankfort, *Kingship*, 146, 329, n. 15, a text of the Nineteenth Dynasty.

21 S. Morenz, *Egyptian Religion*, London, Methuen, 1973, 145, citing a papyrus in the Turin Museum.

22 T.G. Allen, *The Book of the Dead or Going Forth by Day*, Chicago, IL, UCP, 1974, 118–20. A similar invoking of the manifold forms of Ra (75 in all) is contained within the Litany of Ra, see Piankoff, *Litany*; Kemp, *How to Read*, 20–22 cites other examples of the multiplicity of names of things associated with the gods.

23 Note that here, the text in square brackets is a restoration of the ancient original; the text in round brackets is the author's commentary. Hieroglyphic text: K. Sethe, *Dramatische Texte zu altaegyptischen Mysterienspielen*, Leipzig, Hinrichs, 1928, 23–35; translation in Lichtheim, *Literature* I, 52–3, and note 18, above.

24 K.V. Flannery, *CAJ* 9 (1999), 3–21.

25 A review of this early evidence within a discussion of its wider significance is I. Hodder, 'Probing religion at Çatalhöyök: an interdisciplinary experiment.' In I. Hodder, ed., *Religion in the Emergence of Civilization: Çatalhöyük as a Case Study*,

Cambridge, CUP, 2010, 1–31.

26M. Dee, D. Wengrow, A.J. Shortland, A. Stevenson, F. Brock, L. Girdland Flink and C. Bronk Ramsey, *Proceedings of the Royal Society* A (4 September 2013), http://rspa.royalsocietypublishing.org/content/469/2159/20130395, penultimate paragraph.

27Papazian, *Domain*, is a detailed exploration of this theme in early Egypt.

28M.W. Dee, D. Wengrow, A. J. Shortland, A. Stevenson, F. Brock and C. Bronk Ramsey, *JAS* 46 (2014), 319–23; http://rspa.royalsocietypublishing.org/content/469/2159/20130395; A. Stevenson, *CAJ* 25 (2015), 145–61.

29Petrie and Quibell, *Naqada*; W. Kaiser, *MDAIK* 17 (1961), 14–18; B.J. Kemp, *JEA* 59 (1973), 38–43; W. Davis, *MDAIK* 39 (1983), 17–28.

30Quibell and Petrie, *Hierakonpolis* I; Quibell and Green, *Hierakonpolis* II are the reports on the first excavations. The extensive excavations of more recent times on the crucial settlement and cemetery sites on the desert can be followed through the issues of *Nekhen News*: www.hierakonpolis-online.org/index.php/nekhen-news, and the syntheses, R. Friedman, 'Hierakonpolis', in Teeter, *Origins*, 33–44; R. Friedman, 'Hierakonpolis', in Patch, *Dawn*, 82–93. Also R. Friedman, *JARCE* 45 (2009), 79–103, and T. Hikade, G. Pyke and D. O'Neill, *MDAIK* 64 (2008), 153–88 for the localities HK29A and HK29B.

31Quibell and Green, *Hierakonpolis* II, 20–2, Pls LXXV–LXXIX; [F.W. Green], *The Prehistoric Wall-painting in Egypt*, [London, BSAE, 1953]; H. Case and J.C. Payne, *JEA* 48 (1962), 1–18; J.C. Payne, *JEA* 59 (1973), 31–5; B.J. Kemp, *JEA* 59 (1973), 36–43.

32Moeller, *Urbanism*, 94–103.

33A.H. Gardiner, *JEA* 30 (1944), 23–60 discusses in some detail the problems of Behdet and related matters.

34R. Bussmann, *JEA* 100 (2014), 311–37.

35N. Moeller, *EA* 23 (2003), 7–9; N. Moeller, *CAJ* 14 (2004), 261–5; N. Moeller and D. Farout, *EA* 31 (2007), 14–17; Moeller, *Urbanism*, 226–32; B.J. Kemp, *Antiquity* 51 (1977), 185–200; M. Bietak, 'Urban archaeology and the "town problem" in ancient Egypt.' In K. Weeks, ed., *Egyptology and the Social Sciences*, Cairo, AUC Press, 1979, 97–144, esp. 110–14.

36Several of the chapters in Teeter, *Origins*, provide a good introduction.

37Thucidydes I,10.

38D. O'Connor, *Abydos: Egypt's First Pharaohs and the Cult of Osiris*, London, T&H, 2009.

39Dreyer, *Umm El-Qaab* I; G. Dreyer, 'Tomb U-j: a royal burial of Dynasty 0 at Abydos.' In Teeter, *Origins*, 127–36.

40Manetho claimed that the first two dynasties were from the city of This, but this might reflect the same connection with the Abydos cemetery that we make. Hierakonpolis was a place of no importance by his time and he makes no mention of it. The city of This and its god Onuris had no position of special significance in the later symbolic geography of Egypt.

41Wildung, *Rolle*, 4–21; T.C. Heagy, *Archéo-Nil* 24 (2014), 59–92. For the Early Dynastic kings, the later lists used alternative names to the Horus names familiar to us from Early Dynastic sources, and there remains a technical problem in equating the two sets for the very first group of kings. A mud seal impression of the First Dynasty from the Umm el-Qaʾab which lists successive kings features the *men*-hieroglyph prominently but not as a royal name Menes, see G. Dreyer, *MDAIK* 43 (1987), 33–43.

42Waddell, *Manetho*, 1940, 26–33. Min and the founding of Memphis is in Herodotus Book II, 99; A.B. Lloyd, *Herodotus Book II: Commentary 99–182*, Leiden, Brill, 1988, 6–13.

43The warning given in note 70 for Chapter 1 should be borne in mind. The names might be inventions introduced to give the very sense of continuity between men and gods that seems satisfying to us as well.

44I. Regulski, 'The origin of writing in relation to the emergence of the Egyptian state.' In Midant-Reynes and Tristant, *Origins*, 985–1009, the quote being from p. 1001. The 'evolution of simplicity' is a theme explored by D. Wengrow, *The Archaeology of Early Egypt: Social Transformations in North-East Africa, 10,000 to 2650 bc*, Cambridge, CUP, 2006, Ch. 8.

45The same theme can be applied to explain the symbolism of the Narmer Palette, D. O'Connor, 'The Narmer Palette: a new interpretation.' In Teeter, *Origins*, 145–52.

46R. Friedman, 'Hierakonpolis', in Teeter, *Origins*, 33–44, pp. 36–40; V. Linseele, W. Van Neer and R. Friedman, *JARCE* 45 (2009), 105–36; R. Friedman, 'Hierakonpolis', in Patch, *Dawn*, 82–94.

47G. Dreyer, *MDAIK* 46 (1990), 53–90, pp. 86–7.

48M. Verhoeven, *CAJ* 12 (2002), 233–58.

49The earliest evidence for the pairing of Horus and Seth is almost as ancient, from the reign of King Djer of the First Dynasty. In a queen's title 'She who sees Horus and Seth' the king is presented as an embodiment of the two gods, A.H. Gardiner, *JEA* 30 (1944), 59, note.

50A. Stevenson, *CAJ* 25 (2015), 145–61.

51Ayrton et al., *Abydos* III, Chapter I; L. Bestock, 'The first kings of Egypt: the Abydos evidence.' In Teeter, *Origins*, 137–44; L. Bestock, *JARCE* 48 (2012), 35–79.

52The basic publication is Firth and Quibell, *Step Pyramid*; Lauer, *La pyramide*. A valuable and detailed summary is J.-Ph. Lauer, *Histoire monumentale des pyramides d'Égypte* I, Cairo, IFAO, 1962. Some remarkable architectural drawings of the timber and matting architecture prototypes are in H. Ricke, *Bemerkungen zur ägyptischen Baukunst des alten Reichs* I, Zurich, Borchardt-Institut für ägyptische Bauforschung und Altertumskunde in Kairo, 1944.

53The stone-built enclosure to the west, the Gisr el-Mudir, would be a precursor if a Second Dynasty date could be confirmed, see I. Mathieson et al., *JEA* 83 (1997), 17–53; I. Mathieson et al., *JEA* 85 (1999), 21–43.

54Firth and Quibell, *Step Pyramid*, Pls 15–17, 40–42. J.-Ph. Lauer, *Monuments et Mémoires* (Fondation Eugène Piot) 49 (1957), 1–15; F.D. Friedman, *JARCE* 32 (1995), 1–42; F.D. Friedman, 'Notions of cosmos in the Step Pyramid Complex.' In Manuelian, *Studies* I, 337–51.

55The most explicit early reference occurs on the Palermo Stone in a First Dynasty entry (probably for King Den). It shows the double throne dais and accompanies it with the legend: 'Appearance of the King of Upper Egypt, Appearance of the King of Lower Egypt: *Sed*-festival'. See Wilkinson, *Annals*, 107–8.

3

The dynamics of culture

If I visit the pyramids of Giza or the decorated temples and tombs at Luxor I am aware immediately of facing a distinctive human creation. I will feel the same when in the presence of a mediaeval mosque in Cairo or a castle or cathedral in Europe. All are products of great and distinctive traditions of culture. They combine the essence of contemporary high knowledge and of deference to power. In their appearance, they leave conveniently distinctive images in the mind. When, on the other hand, as an archaeologist I excavate amidst the dwellings of one of ancient Egypt's poorer communities, the distinctiveness is much less. The men from the local village whom I employ to do the digging will see the outlines of human life not too different from their own: here the kitchen, there the cattle byres. The ordinariness and predictability can be discouraging. I have to remind myself that culture and environment are never really the same from place to place and from time to time, and that the search for variation within the broad regularities of human life is an essential part of understanding the complete spectrum of human behaviour. That kind of variation might be less visually arresting than the subject matter of tourist guidebooks, and harder to define, but it is bound to be there and is the prime source for investigating life at grass-roots level.

'Great culture', which in time becomes tourist culture, was not the spontaneous creation of the common person. It is no accident that we meet its manifestations in large buildings where gods are honoured, in palaces, mansions and castles. Great culture, which requires patronage and the direction of labour, originates in courts. The wealth, size, splendour, craft standards and intellectual novelties are part of the instruments of rule, encouraging personal abasement, the attitude of deference. Temple and palace, and in the case of ancient Egypt their extensions into the culture surrounding the dead, often seem to account for much of what is distinctive about past cultures. When well established, a great tradition may have an influence that is felt throughout society. But to reach this stage it has to expand at the expense of other traditions. It has to colonize the minds of the nation.

Whatever does not succumb becomes 'folk culture' or 'popular culture' (although in the modern world, aspects of the latter have achieved an unprecedented level of elevation).

Ancient Egypt is amongst the earliest of the world's great cultural traditions. We are fortunate in being able to observe, through a relative abundance of material, the codification of tradition by which it started at the time of transition to the First Dynasty. In the beginning, however, it had a restricted scope. The objects were themselves small in size, and were probably limited in numbers. They expressed the pretensions of a new generation of rulers, and the beginnings of an attempt to systematize and to express more explicitly knowledge about the profundities of the universe. But should we assume that, from this moment on, all cultural expression in material form took its cue from this source? Did the First Dynasty kings throw a cultural switch that instantly lit up the whole country? Was there the will, or the means, or even the interest to convert the whole country to this intellectual outlook?

To answer these questions we must investigate how court culture expanded at the expense of other local traditions, and consider not only early works of art, but also the general archaeological record in which we might find traces of 'folk culture'. One way of thinking about this is to see the subject as a manifestation of the two sources of human order. One is when individuals retain some autonomy even when acting as part of a larger group. When expressed through the act of building the term 'self-organization' is useful; in other forms of expression its equivalent is 'self-defining' and together they represent the 'informal' and draw upon what appears to be spontaneity. The other source of order is a codified style which prescribes, in part through teaching, what the proper forms are, whether in art or in architecture. Those that follow considered and authoritatively promoted models can be said to be 'formal'. A chronological way of ordering the evidence is then to recognize a general evolution in degrees of formality in culture in which the self-defining loses ground.

A common way of introducing ancient Egypt is through a selection of artistic and architectural masterpieces, produced as expressions of an accepted codified style. Selections of this kind provide a record of continuous development in which geographical homogeneity is also prominent. From this perspective, the source material does provide a generally most satisfactory basis for writing a history of Egyptian 'high' culture. From prehistoric times, a single line of progress can be followed from the late predynastic cultures of Upper Egypt, through

the Early Dynastic Period to the full flowering of Pharaonic culture in the Old Kingdom. Late predynastic artistic achievement comes to us as a series of isolated objects, small in scale, individual in expression. Its culminating product is the Narmer Palette from the very beginning of the First Dynasty (Figure 2.10, p. 81). From this phase of great creativity emerged a carefully composed visual art that successfully moulded the shape of Pharaonic culture to the very end, and just as successfully has influenced modern appreciations of ancient Egypt. Hieroglyphic writing, statuary and two-dimensional art became aspects of a single, rigidly studied mode of visual expression. An integral part of the process was the development of an iconography of gods which, whether they represented speculative abstractions or the presiding spirits of local places, reduced them to variants of a single image. This was the achievement of the Early Dynastic Period, the invention of a world of ideas and forms. Subsequently the Egyptian impetus for innovation turned to monumental architecture, culminating in the pyramids and their temples. By this approach the lights were indeed switched on in the Early Dynastic Period. Later dynasties added to their number and luminosity.

Pinning down the gods

Pharaonic Egypt presents us with a clear instance of a common aspect of complex societies: the identification, in particular localities, of gods who were felt to be accessible, usually through the adoption of a deferential attitude that often needed to be expressed through gifts considered to be worthy, and specially composed forms of words and prescribed actions. As time passed, traditions of formality developed (including calendars of feasts), which discouraged variation. Spontaneity and improvisation nevertheless remained possible. Knowledge of imaginary beings (gods and spirits, including the element that was divine within people, both living and dead), like all knowledge, was ultimately internal to individuals. They carried it with them, in the home, when dragging stones in quarries, when travelling to a foreign land. That knowledge could trigger spontaneous acts of deference or reverence when far away from the gods' places of origin.

This was (and is) a particular instance of a wider form of human behaviour: marking one's presence in order to give a sense of permanence to a passing moment that appeared significant at the time and, with the spontaneously inventive power of the imagination, also

giving it explicit meaning defined by the knowledge of the time. A single graffito or deliberately selected and placed object can set off a pattern of copied behaviour, in effect a local tradition, and the underlying attitude can range from the casual, to a claim of ownership, or to an appeal to transcendental power. Although patterns recur, this kind of behaviour cannot be reduced to rules. A strong element of randomness is present. Some distinctive desert landscapes, for example, attracted graffiti and shrines, but many more, equally distinctive, did not. It took only the action of a single individual to make a place seem significant and thus to prompt others to repeat the action, sometimes over long periods.

How it could work is illustrated by records carved in the Wadi Hammamat in the eastern desert, at a place where there were quarries for siltstone and the closely related greywacke, a hard, greenish-grey stone prized for statues and sarcophagi (the Narmer Palette, Figure 2.10, p. 81, is an example).[1] Amongst the large number of ancient graffiti must be one which was the earliest but cannot now be identified, either left by someone collecting loose pieces of stone for carving into objects or, since the earliest probably belong to people who pre-dated stone-carving, pausing whilst using the long, winding wadi as a route between the Nile valley and the Red Sea. Over a long period of time it prompted others to carve on the surfaces and with growing elaboration. As ever, human imagination supplied added layers of meaning. So a large expedition arrived there near the end of the Eleventh Dynasty (reign of Menthuhotep IV, *c*. 2001–1994 BC). No sooner had it arrived (so a text tells us) than a pregnant gazelle appeared which seemed to lead the expedition to a particular spot where it gave birth, the patch of rock being just right for the extraction of a sarcophagus lid. The gazelle was killed as an offering to the presiding spirit of the place who required a name: not Horus or Hathor, who might in other desert locations have been chosen, but in this case Min 'Lord of the Desert Hills' who was also the presiding spirit of the town of Coptos at the Nile valley end of the Wadi Hammamat (the remains of an early shrine at Coptos are described below, pp. 132–5). Eight days later a thunderstorm struck, described as a revelation of the god's appearance (or 'forms') and creating a temporary pool of drinkable water. After five days the desired block of stone had been cut and brought down from the quarry face. In celebration, cattle and goats were slaughtered and incense burnt, simultaneously a thank-offering to Min and a communal feast for the large workforce. We have this narrative because it was recorded in

hieroglyphic texts carved on adjacent rock surfaces along with a picture of the king offering milk before Min (Figure 3.1).[2] A scene of this kind is more familiar on the walls of temples. Its presence here illustrates how a tradition, by now quite ancient, of marking an individual's presence was elevated to something more significant by importing the formula of named god and reverential practice.

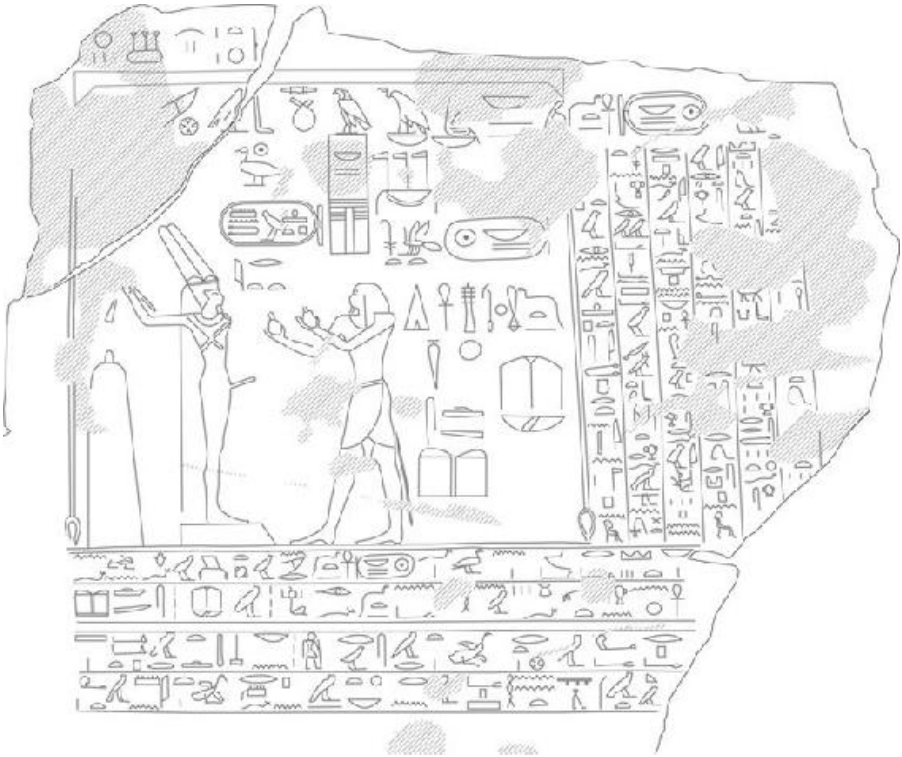


*Figure 3.1*Encountering god in the landscape. King Menthuhetep IV (*c*. 2001–1994 BC) of the Eleventh Dynasty offers milk to the god Min of Coptos as thanks for a successful quarrying mission to the Wadi Hammamat. The scene and text are carved on a rock surface adjacent to the place of rock extraction. The text describes how the birth of a gazelle on a slab of rock was a miraculous sign for where the extraction should begin. The bottom two horizontal lines of text give the titles and name of the high official in charge of the expedition, the vizier Amenemhat. The sculptor made no attempt to create a neat shape for the carving. The triangular piece missing from the bottom right corner was already broken away. The beginnings of the columns and lines of hieroglyphs follow the broken edge: no part of the text is missing. The text is dated to the king's second year of reign, which is also said to be the first occasion for celebrating the *Sed*-festival. After L*D* II, 149.c and J. Couyat and P. Montet, *Les inscriptions hiéroglyphiques et hiératiques du Ouâdi Hammâmât*, Cairo, IFAO, 1912, Pl. XXIX.110.

Over the centuries many more expeditions were to come, leaving their records carved in the same locality. Many of these records are no

more than the names of the men who formed the expeditions. Yet apart from a small number of huts of boulders, nothing seems to have been built, although, in the late first millennium BC, one secluded piece of quarry received a concentration of commemorative scenes and texts, qualifying it, in modern literature, as a 'chapel' or 'shrine' (although it is unlikely to have had staff to look after it). Apart from this late attempt at greater formalization, the rough inscribed rock faces provided a sufficient focus of attention for visitors wishing to direct their thoughts and perhaps the actions of offering to the presiding spirit of the place. Nothing as elaborate as a guide-book temple was created during two thousand years.

At some desert locations visitors defined a point of contact with a presiding spirit more overtly. One of these was in the hills beside the Red Sea, at Gebel Zeit where, between the Twelfth Dynasty and late New Kingdom, they mined the mineral galena (*msdmt*, lead sulphide, thus lead ore), used as an eye pigment. As work got under way a shrine was created in a natural cave. Eventually, in the New Kingdom, a shelter, *c*. 6.5 m across, was built from rough stones on a nearby terrace (Figure 3.2).[3] An arrangement of post holes suggests that a small canopy was erected inside. Those who used the shrine marked their presence by leaving a small object behind, frequently one of the brittle faience rings that were popular at the time. Some were left in cracks between the stones; others had been gathered into a pottery jar and buried outside. Small stelae and statuettes were buried in the north-east corner. These show that some of the people who came to the shrine had their own personal view as to whom they were addressing: Hathor, 'Lady of Galena (*msdmt*)', Horus, 'Lord of the Desert Hills', Min of Coptos (as at the Wadi Hammamat) and Ptah of Memphis. There seems to have been no formal identification: the simple structure was there to provide a conducive atmosphere for individuals to open portals in their minds (help-lines of a sort) to a god or goddess whom they had already chosen or who had been suggested by another member of the expedition. In view of the isolation and difficulties of supply, it is unlikely that anyone was left to look after the shrine between expeditions.

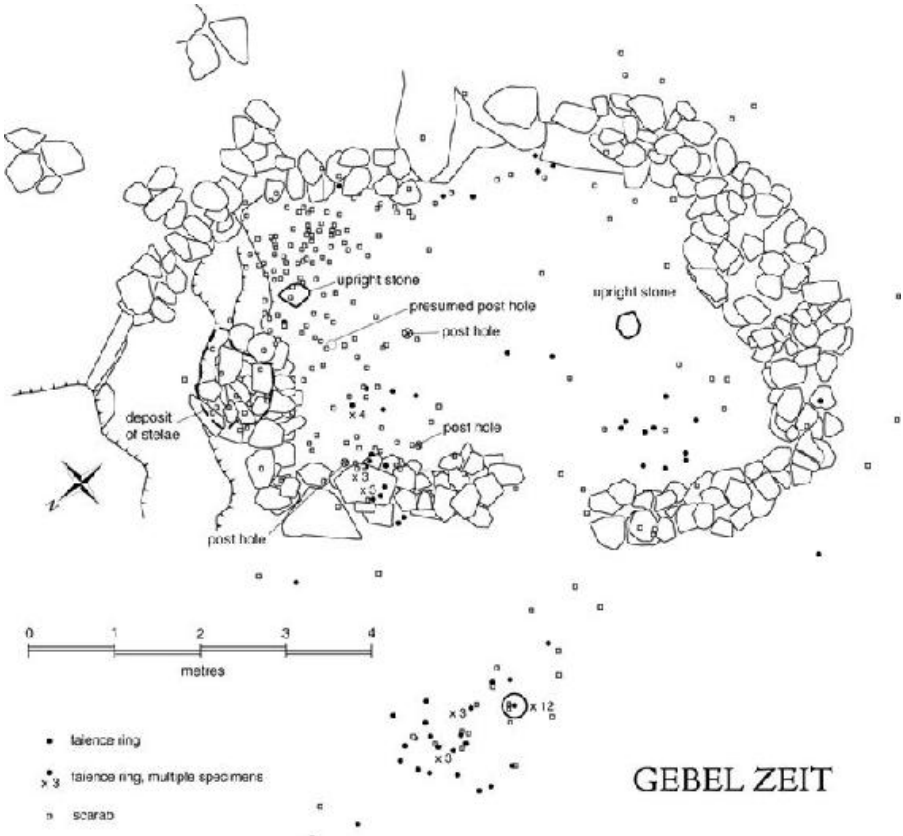


*Figure 3.2*A distant place for encountering gods: a shelter built of rough stones near the mines for galena (lead sulphide) at Gebel Zeit, close to the Red Sea coast. To judge from the objects found in and around it, it provided the quarry teams with an agreed place where they could contact protecting spirits and mark the occasion by leaving a small offering. The commonest objects to have survived were faience rings and scarabs, of which respectively 85 and 418 were found. Other objects included stelae and pottery female figurines. After Régen and Soukiassian, *Gebel el-Zeit*, 78, Plan 7; 132, Plan 8. Twelfth Dynasty to late New Kingdom.

When back home in the Nile valley and delta, in a world made more complex by the development of innumerable local traditions, the same people rejoined a world of many options in the search for protection and the expression of gratitude beyond the society of the living. Some options were to be found in the home, where spells could bring protection and where, at least in later periods, ancestors could be remembered and honoured. Those ancestors and the spirits of the more powerful dead were primarily accessible, however, at their tombs and the offering-places and chapels with which they were often provided. These were regular destinations for many Egyptians, either from the obligations of paid employment as officiants in the permanent offering-cults or from inner promptings. But as a result of

moments of invention and personal initiative places within the community were also selected where people could feel close to particular members of the broad assemblage of gods and ancestral spirits that the Egyptians recognized. Some of these places failed to survive for long; others gained sufficient prestige to have a long history. These places of quickened imagination are the shrines and temples of society. In time they served also as repositories of local prestige, manifested through donations of objects, of revenue-producing land and of labour. In their shapes as places and in the character of the donations they chart their own history. Although it could not have been foreseen in the earlier periods, that history was towards a single, carefully constructed formal style which integrated most aspects of material culture. Formal style is open to being broken up into component parts and thus to being taught, using examples as approved models, and hence to involving a greater number of people at various levels of skill. It is also more open to scaling up to monumental size. Full formality of style is what we see as typical of ancient Egypt, the style of the Pharaohs.

The gradual adoption of formality of style is not easily defined by the chronological divisions of dynasties and broader historical periods. I have been inclined to group the earlier material under the heading 'Preformal'. In terms of architecture, the temples of the New Kingdom, which mark a major extension of patronage in favour of towns, giving each a striking centre of local prestige, represent the flowering of formality and so a 'Mature Formal' style. 'Early Formal' covers intermediate forms, whilst the 'Late Formal' temple absorbed much energy in the period between the Thirtieth Dynasty and the earlier part of the Roman occupation of Egypt.

This chapter is primarily concerned with places of encounter with gods, and the term 'Preformal' still implies something that can be recognized as a shrine. But self-evident recognizability cannot be extended indefinitely back into Egypt's prehistory. Readily identifiable shrines – designated spaces that we can recognize were created for communication with accessible and named invisible beings – appear in the archaeological record relatively late. Was there a yet earlier phase which we are still unable to see? The transition from more-or-less invisibility or insubstantiality to visibility and growing formality has been observed in African societies since their contact with the West:

> The more a society departs from the simplest forms of social

> organization – lineages and clans – in the direction of state structure, the more the places of worship tend to take on importance. In other words, political and administrative centralization itself requires a certain concentration of religion into well-defined buildings, while the division of society into lineages and clans favors the scattering of places of worship and diminishes their distinctiveness to the point that certain of them blend into the environment.[4]

An example of how simplicity in this context could manifest itself is provided by accounts of the people of Ingessana (on the Sudan-Ethiopian border), where the basic form of settlement remained till modern times the individual farmstead composed of a cluster of circular dwellings surrounded by a fence. The shrine was a hut, in appearance indistinguishable from others and usually empty. Although regarded as dwelling houses for gods, an important part of their purpose was to shelter those outside from what was thought to be inside. Myths explained them as having been 'built as ordinary houses but at an extra-ordinary time, usually at the origin of the world as it is today'.[5] They contained no carved images of divinities; indeed, they have sometimes been described as containing no artefacts at all.

How the peoples of the Egyptian Nile valley imagined their world before the later predynastic phases is largely lost to us. We should not assume that it resembled the later world of named gods often associated with places or that it drew forth distinctive behaviour at particular localities. That formalized picture is part of the runaway invention of Pharaonic culture which took place as the dynastic state came together, passing through a distinctive 'intermediate' phase during the Nagada culture as it did so. What we can do is to examine the evidence for early manifestations and try to identify its components and whether they arose as a defined group. The evidence is not only architectural. It extends to groups of mostly small objects to which the term 'votive' is generally given.

Communicating via objects

In the fortified town of Iken (modern Mirgissa) in Nubia a small shrine was created during the Eighteenth Dynasty to house a cult of the goddess Hathor, in her local form 'Lady of Iken' (Figure 3.3).[6] The cult was an Egyptian creation to serve the needs of the small local and

probably predominantly Egyptian population. Hathor represented the kindly side of nature. At Mirgissa, an isolated desert location far from Egypt's homelands, she was a person to turn to for solace. It is one of a number of small shrines where the goddess Hathor was honoured and where people left small objects inside the shrine, in this case within a space so small that it would have been necessary to kneel or crouch down to reach the offering-stone which was set on the ground (although it was a step upwards in formality from the shrine at Gebel Zeit, Figure 3.2, p. 114). Many of the objects were of a kind – beads, pendants, broken pieces of glass and faience – which, when found in other contexts, we would recognize only as part of the debris of ordinary living. They had not been made to be used in this way. They had become votives only when they were left inside the tiny shrine.

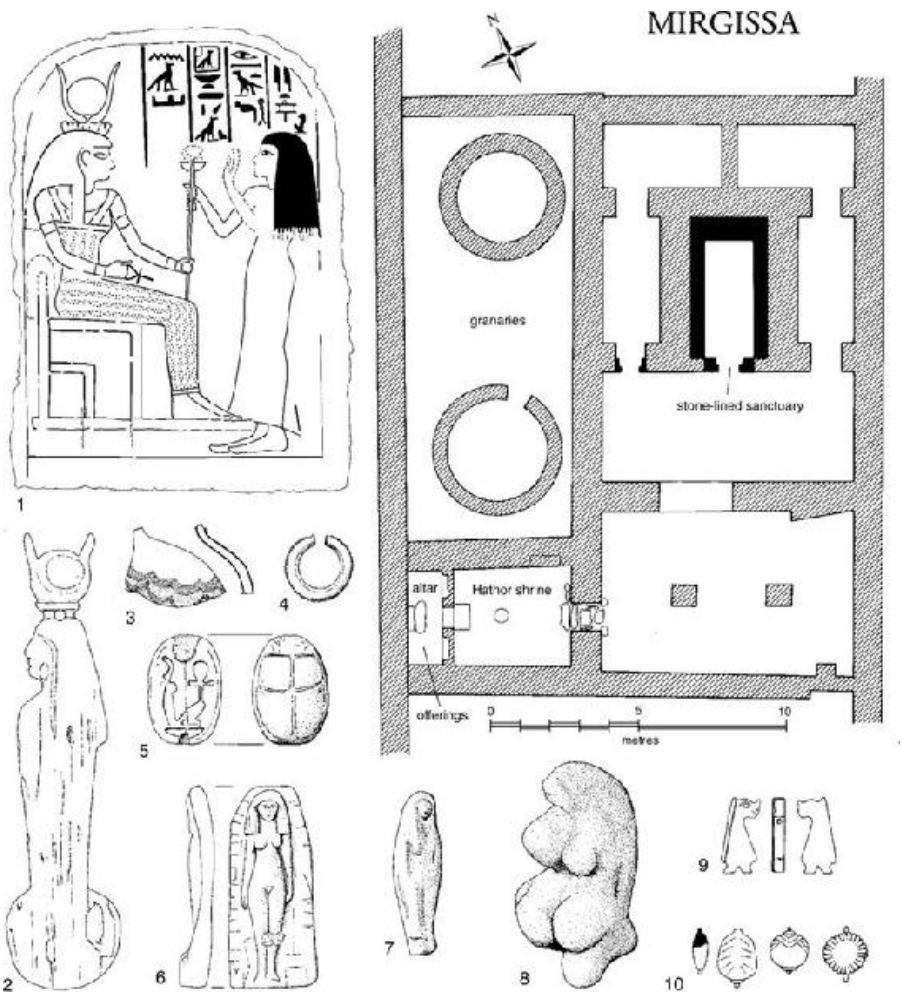


*Figure 3.3*Judging objects by where they are found. *Top right*. Plan of the New Kingdom temple at Mirgissa, including the side shrine to Hathor. After Vercoutter, *Mirgissa*, 307–9, Figs 1–4; H. Lyons, *JEA* 3 (1916), 182–3. *Left and below*. Selection of objects found in the Hathor shrine. All (even the wooden stela) would be at home in domestic settings. They acquire the term 'votive offerings' only from being found in a shrine. (1) Wooden stela with designs in black, red, blue and green on white. On the left, seated on a throne, is the goddess Hathor 'Lady of Iken' (the ancient name of Mirgissa). Facing her and presenting her with a bowl of incense is a woman named Tamehit ('Northern breeze'). Height 18.5 cm. Museum of Khartoum. (2) Painted wooden counterweight from a bead collar in the form of the goddess Hathor. (3) Sherd from a polychrome glass vessel. (4) Earring in blue faience. (5) Large blue faience scarab bearing the prenomen of Amenhetep III. (6) Painted limestone figurine of a woman on a bed. (7) Blue faience figurine of woman. (8) Natural pebble. (9) Faience bead in the shape of the goddess Taweret. (10) Four faience collar pendants in plant designs. The stela after J. Vercoutter, *RdÉ* 16 (1964), 181, Fig. 2; the other objects after Vercoutter, *Mirgissa*, 328–60. No scales are given in the publication. The illustration (without the stela) originally appeared in B. Kemp, *CAJ* 5 (1995), 27, Fig. 1.

A characteristic of many of the pieces is a glossy turquoise colour, commonly used in making glass and faience. Whether through cause or effect we cannot tell, but Hathor's cult at the main source of turquoise in Sinai gave a name to her local form there, 'Lady of Turquoise'. Thus fragments of turquoise-coloured glass or faience (and, by further extension, objects of these materials in other colours) were deemed to be pleasing to her. Their shape was less important or of no importance at all. They acted as a special currency by means of which transactions were possible between humans and gods. Gratitude for deliverance was one reason. Although of a different form, a tiny stela from a shrine on a hillside at Asyut, for example, where the canine-formed god Wepwawet was honoured, expresses gratitude for safe deliverance from the attack of a crocodile.[7] A few of the pieces at the Mirgissa shrine have the shape of a woman attached to a plaque which sometimes has the form of a bed. But one must be careful in thinking that one can guess the meaning. One spell in a papyrus collection to be recited over the figurine of a woman is for the alleviation of stomach ache. The process is made explicit. Once certain words have been spoken 'over a woman's statue of clay', then: 'As for anything he suffers from in [his] belly – the affliction will be transferred from him into the Isis-statue, until he is healed.' Since similar figurines are fairly common in houses of the period (the New Kingdom), the spell could actually have been used in the house without need of a shrine.[8]

We are commonly attracted to small objects that can easily be handled or even held in the hand and which often have the shape of a

person or animal. Their meaning need not be very specific and they can attract the possibility of communion, offering quiet comfort. We should not take for granted that a particular shape used in the past had a meaning that we can recover or which was even defined in words. Shapes resonate in the mind, being variously pleasing or otherwise, or bringing associations from other experiences, none of them necessarily amenable to the codings of language. The fact of personal possession can be its most important trait. Leaving something of oneself at a place with a special atmosphere can be a significant act in itself, whether that something is a possession (a faience ring, for example) which a person can leave in a shrine or (as in the case of the Wadi Hammamat quarry) is a personal name carved on a rock. One can ask the question, is this an area of behaviour that had been expressed over the millennia in ways that archaeology does not pick up and only in the latter part of the Predynastic Period became more explicitly defined and permanently visible, as levels of craftsmanship, the supply of raw materials and the appearance of greater craft specialization rose as society became more complex?

Some of the early sites, as well as places like the Gebel Zeit shelter of the New Kingdom and evidence from houses at Amarna (pp. 371–2), suggest that we should not be too strict or formal in how we envisage a shrine.

As illustrated in this chapter, concentrations of small objects, often representational, are one of the defining features of early shrines; they can be, in fact, the only defining feature. The practice raises the further question, was the act of marking a place with something of oneself the key to this behaviour, with the formalization of ideas about gods a secondary development? The variety of shapes of the objects in question suggests that personal preferences dictated the forms – inner projections of the individual's imagination (inevitably limited by shared experiences with the local group). These inner projections of the imagination might not yet have had sufficient names and linkages to form the kind of system of knowledge that developed in Pharaonic times and that we like to impose on the past.

What was offered to users by some of the places which archaeology signals as perhaps significant in this context was confinement, privacy, semi-darkness, a place where they could clasp small objects in the hand and – perhaps aided by closed eyes – drift into a state of reverie in which the mind escapes from the logic of the visible world to the conjurings of the imagination, typically seeking help and guidance or giving thanks for these in return. The experience can work without it

being necessary to have an explicit focus of attention – a statue or a two-dimensional depiction – although a personal object held in the hand probably helps. By leaving it behind, something of the owner remained there, to join the accumulated promptings from previous visits and previous visitors. How careful we must be in drawing boundaries is illustrated by an Old Kingdom building at Elephantine (see p. 197), which seems to have been the residence of the town's governor or mayor, but at the same time was equipped in a way that marks it as a place of cult.

Early shrines

The first three examples – Elephantine, Tell Ibrahim Awad and Tell el-Farkha – are presented here in a decreasing order of the clarity which they bring to the subject. The fact that Tell el-Farkha seems to be earliest perhaps makes the lack of clarity of meaning a significant fact in itself.

Elephantine[9]

This small town site on the southern tip of Elephantine Island was built directly over natural rounded granite boulders. Its development as a town, with a fortified annexe, occurred during the Early Dynastic Period (and is illustrated in Chapter 5, with Figures 5.3 and 5.4, pp. 199, 201). In 1972–3 a shrine serving this early town was discovered (Figure 3.4 and Photograph 3.1). It lay in an angle formed by the walls of the town and the fortress, amidst the boulders themselves. This setting has provided archaeology with a so far unique set of circumstances. At other temple sites, on flatter ground, the rebuilding and enlargement of temples in later periods inevitably did much damage, and sometimes wrought havoc, to the earliest shrines. Not so at Elephantine. The builders of later temples, in seeking to escape the space restrictions created by the boulders surrounding the early site, simply filled the site in, and then paved it over, so sealing the early shrine and its associated floors and artefacts. The resulting archaeological record gives us, for the first time, a fairly complete picture of what an early local shrine looked like.

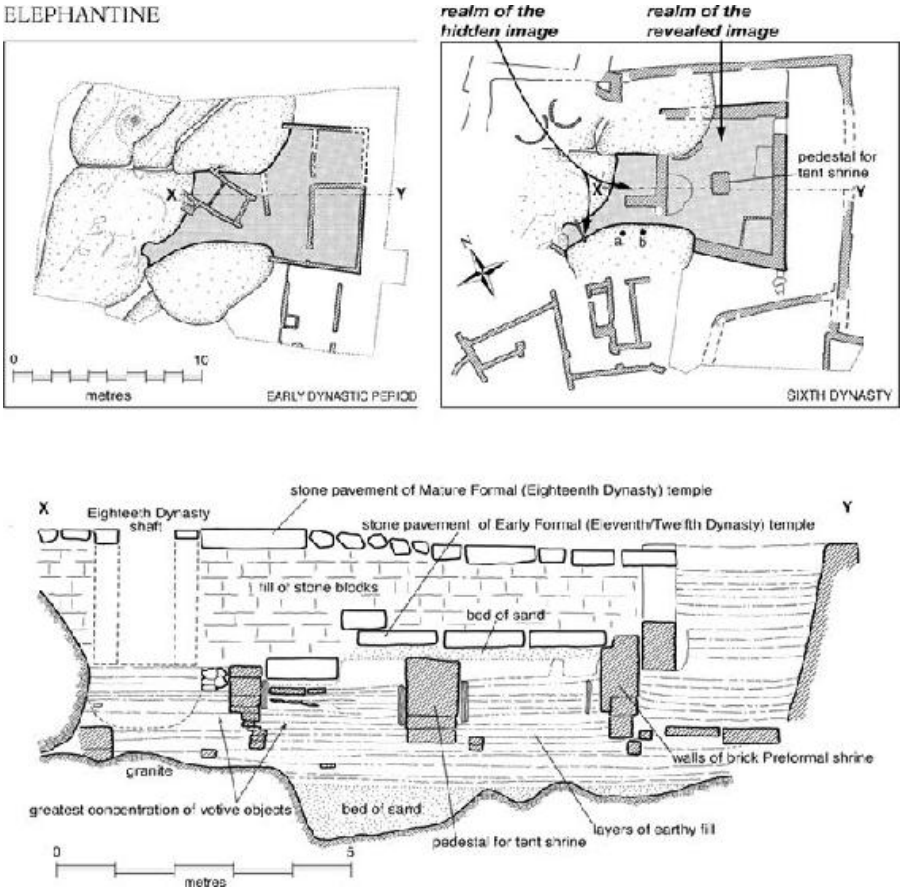
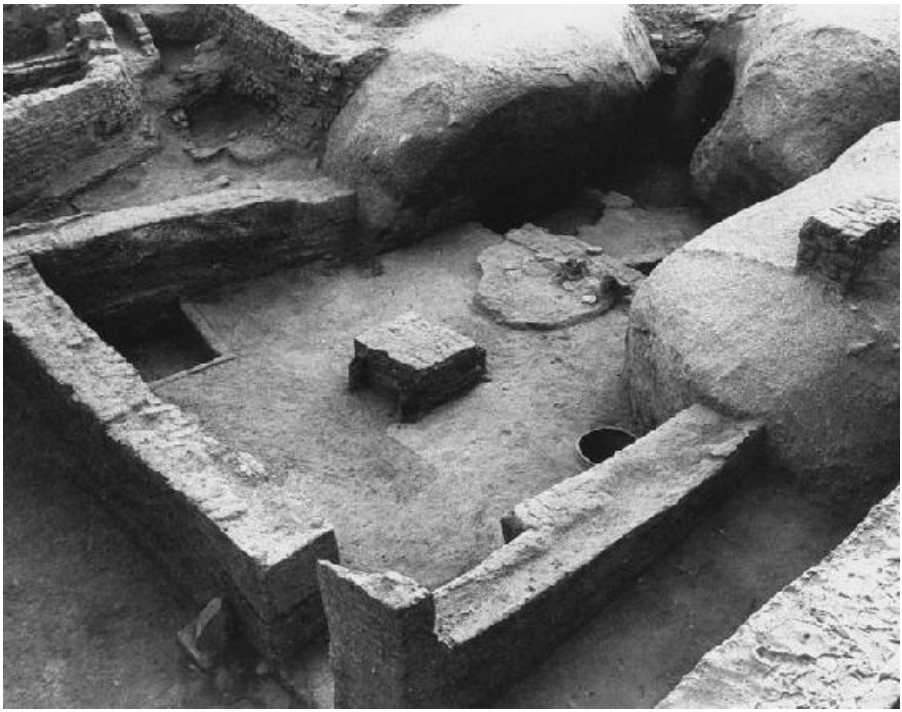


*Figure 3.4*The early shrine at Elephantine, preserved beneath the pavement of the Eighteenth Dynasty temple of the goddess Satet (see also Photograph 3.1). The two plans at the top record two stages in the architectural evolution of the brick shrine. In the Sixth Dynasty plan, ‘a’ is a cartouche of Pepi II, ‘b’ is a short inscription of Merenra. Below is the section along the line X–Y. For a reconstruction of the pedestal for the portable image see Figure 3.17 (2), p. 147. After G. Dreyer, *Elephantine* VIII, Abb. 1, 16, 7. Figure 5.3, p. 199, marks its location.



Photograph 3.1 Provincial tradition: Preformal mud-brick temple at Elephantine in its late Old Kingdom phase, looking south-west. From Dreyer, *Elephantine* VIII, Tafel 2a. By courtesy of the Deutsches Archäologisches Institut Kairo.

Its history began as a corner at the back of a squarish natural niche between the boulders. It must have looked like a small cave. The qualities of enclosed spaces that emulate cavities within the earth – the term 'chthonic' is quite useful here – can have a strong effect on the imagination, though, as we shall see at other sites (especially Hierakonpolis and Coptos), there were other directions in which the attention could be drawn. The experience of a single unknown individual at a moment in the Predynastic Period must have led to a slowly growing recognition that this was a place of communication with a spirit world. In whatever ways its users communicated they left no marks on the actual rock faces, which seem to have remained in their natural state. The space in front was, however, gradually enclosed, at first by two small brick rooms and then by further walls to create a more clearly defined courtyard (or a roofed area). The development took place within the Early Dynastic Period, although some of the pottery found is of predynastic date.

The basic form of the shrine – a niche in the rock served by modest brick shelters – was kept throughout the Old Kingdom, and apparently on until the time of the reunification of Egypt in the Eleventh Dynasty

(*c*. 2040 BC), a period of six centuries. Over this time the principal change to the shrine's appearance was to create a more neatly defined space in front using thicker walls. In its centre stood a square pedestal, 0.95 × 1.10 m, constructed from courses of brick separated by layers of matting for extra strength. A wooden pole stood against each corner. As will be suggested in a later section of this chapter, this could have been a canopied podium (facing north) to support a portable divine image. The little complex as a whole was then protected by an outer corridor and second wall. Overall, we can identify on a tiny scale the journey of 'appearance' – from a hidden interior to a place of visible presence – around which the architecture of later temples and palaces was designed (most notably, Figure 6.9, p. 268, and Figure 8.5, p. 332).

In the Eleventh Dynasty the shrine was enhanced, carved stone slabs being set into a renewed mud-brick structure, though the plan seems to have been a continuation of the existing one. In turn this shrine was replaced at the beginning of the Twelfth Dynasty (reign of Senusret I) by another building largely made of finely decorated stone blocks. However, to judge from the extent of stone pavement (the loose blocks have been rebuilt in modern times nearby on the site), even the Twelfth Dynasty shrine kept to the same restricted limits as had developed during the Old Kingdom, although becoming a neat structure measuring *c*. 12 × 8 m. The increasing use of decorated stone blocks reflects a general trend in Egypt towards greater court-inspired patronage. In the Eighteenth Dynasty the original site exemplified the move towards greater formality and monumentalism at provincial sites, and it took on a very different aspect. The existing building was pulled down, and the ancient niche and court were filled with blocks of stone in order to build the level of the ground up to the top of the granite boulders. On this new higher and level platform, a larger stone temple was erected, in the reign of Tuthmosis III. The Mature Formal phase had arrived. Yet even at this time the builders tried to maintain contact with the original sacred ground that they had so thoroughly buried. The new sanctuary was sited over the old one, and direct communication was made by means of a stone-lined shaft that descended through the foundations to the floor of the early sanctuary.

If the simplicity of the early shrine is striking, corresponding to the great age of pyramid building in the north, so also is the relative simplicity, even crudeness, of most of the hundreds of small representational objects recovered from the associated floor levels

(Figure 3.5). Many were found scattered within them, but one particular concentration seems to have formed during the Fifth Dynasty. Most of the objects were made from faience (the shiny blue/green glazed synthetic material which was the ancient equivalent to modern plastic), but pottery, ivory, limestone and sandstone were used as well. They can be grouped as follows:

1. human figures: both adults and children, the most numerous group being children with fingers at their mouth; a unique figure is the lower part of a seated king, which bears a single hieroglyphic sign interpreted as reading the name of the First Dynasty King Djer (although from a Sixth Dynasty level);
2. baboons/apes, a few also with fingers to mouth;
3. a small number of animals and birds, the former including frogs, crocodiles, lion, pig, hippopotamus, cat and hedgehog;
4. oval faience plaques bearing at one end the head of an animal, apparently a hedgehog (41 examples of this curious design); there is a parallel from Tell Ibrahim Awad (Figure 3.6 (2), p. 124) where the plaque has a clear boat shape;
5. faience tiles of the type otherwise used in wall inlays, many with an incised or painted sign on the back;
6. faience objects of various forms, mainly large beads, necklace spacers and model pots;
7. natural flint pebbles of curious shapes (and similar to Figure 3.3 (8), p. 117);
8. flint knives.

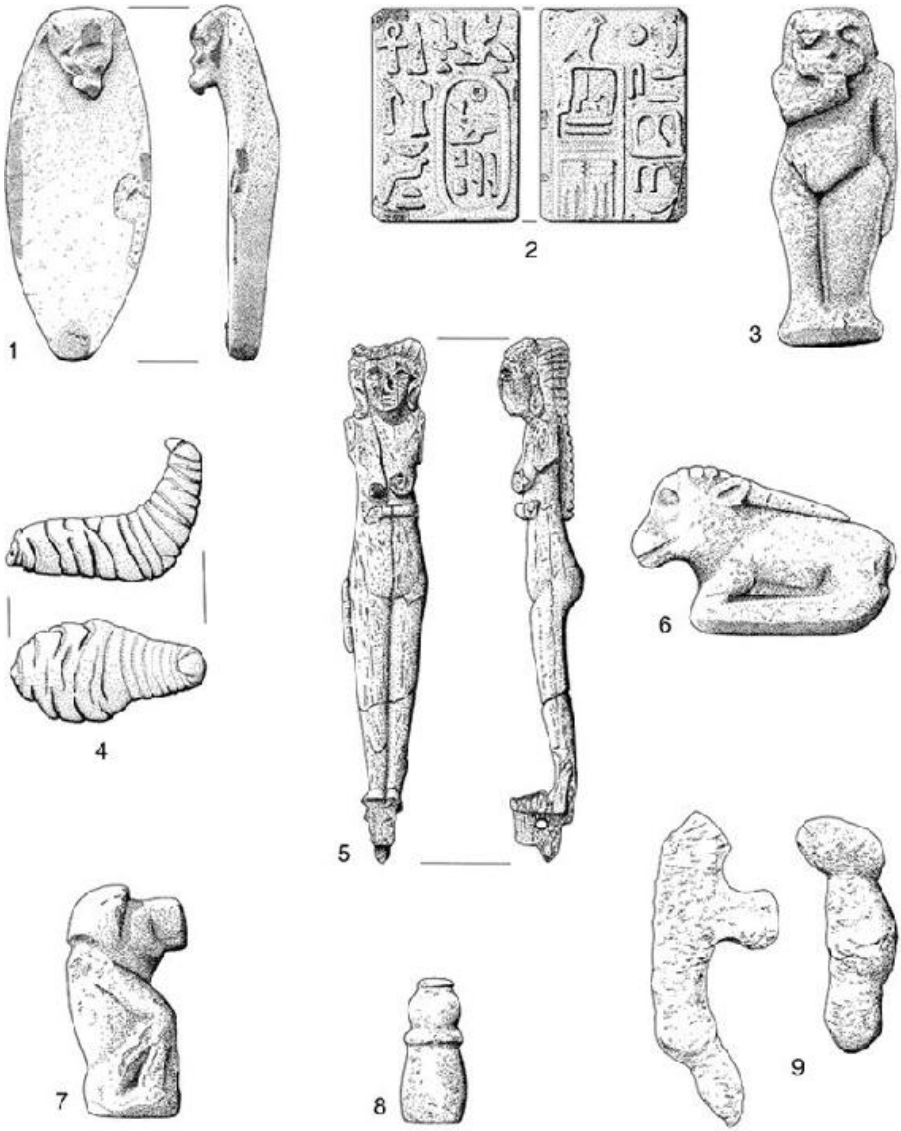


*Figure 3.5*Selection of votive objects from the early temple deposits at Elephantine (*top row*), Hierakonpolis (*middle row*) and Abydos (*bottom row*). (1) Faience plaque with head of hedgehog, height 8.5 cm (after Dreyer, *Elephantine* VIII, Taf. 37.202). (2) Faience plaque commemorating the first *Sed*-festival of King Pepi I, Sixth Dynasty, 6.4 by 4.5 by 1.5 cm (after ibid., Abb. 58, Taf. 56.440). (3) Faience figurine of a young girl, height 8.1 cm (after ibid., Taf. 17.42). (4) Faience scorpion with raised tail and sting, length 7.6 cm (after Adams, *Ancient Hierakonpolis*, Pl. 13.98). (5) Ivory figurine of woman, height 20.4 cm (after ibid., Pl. 44.360). (6) Faience figurine of kneeling ibex, length 9.4 cm (after Quibell and Petrie, *Hierakonpolis* I, Pl. XXII.17). (7) Faience baboon, height 18.9 cm (after Petrie *Abydos* II, Pl. VI.51). (8) Faience model of pot on a stand, height 6.8 cm (after ibid., Pl. XI.244). (9) Two large, natural flint nodules in suggestive shapes, heights 87.6 and 64.8 cm (after ibid., Pl. IX.195, 196).

In addition to these groups a number of objects bore the names of Kings Pepi I and II of the Sixth Dynasty (*c*. 2265–2219 and 2212–2118 BC). Some of them, perhaps all, were in celebration of the first *Sed*-festival (jubilee) of these kings. One was a vase in the form of a squatting ape holding its young. The remainder were faience plaques (mostly for Pepi I). The Sixth Dynasty provided also the only inscriptions found in position: two graffiti of King Merenra (*c*. 2219–2212 BC) and of King Pepi II scratched on one of the granite walls of the niche, the former commemorating a military campaign into Nubia.[10]

This material comes from a series of stratified layers that range through all of the first six dynasties. Yet vertical position does not automatically assign a date of manufacture to an individual piece; it merely shows when it was discarded, and some pieces may have been old when finally buried in the floor of the shrine. The traditions involved clearly began in the Early Dynastic Period, and set a tone that lasted for a long time. The detailed study of the material piece by piece, however, shows that whilst the Early Dynastic Period is the date for the origination of the style and repertoire of forms, it is not necessarily the date for the manufacture of every piece. The tradition ran on through the Old Kingdom, and at the end the faience plaques bearing the names of Sixth Dynasty kings were being produced in the same simple way. A small group of craftsmen, perhaps attached to the shrine, must have met a demand for such objects, retaining forms and techniques over a long period of time, the entire first six dynasties in fact (the almost one thousand years between our conventional dates of 3085–2117 BC).

Another conspicuous feature of this group of objects, which applies also to similar groups from other sites (including Tell Ibrahim Awad, Tell el-Farkha and Abydos), is the absence of representations that can be associated with deities as defined and represented in the formal art which became increasingly pervasive as the Old Kingdom developed (although the Hierakonpolis group includes figurines of hawks, assumed to represent Horus). To judge from the text on a granite naos donated by Pepi I and reinscribed under Merenra (from the shrine area, although its original position is not known for sure), by the end of the Old Kingdom the site was held to be sacred to the goddess Satet, who later appears as one of a group of three Elephantine deities: Khnum, Satet and Anukis.[11] Their forms were distinctive: Khnum was a ram, and the others were women with unusual headdresses. Yet nothing relating to these forms occurs amongst the votive material.

This varied (indeed, heterogeneous) range of material stands in contrast to the standardized forms of gods and goddesses that arose as court thinkers reduced a varied and fuzzily defined assemblage of imaginary beings present throughout the population into the 'pantheon' of gods and goddesses, each with a name and some distinguishing feature, a collective that shapes a good part of our perception of ancient Egypt. Just as how, in the built environment, self-organization pulls in one direction whilst imposed, ordered layouts pull in the other, so in the world of knowledge, self-definition and myriad local spontaneous promptings can find themselves working separately from an academic format preferred by those whose role it is to maintain that format. Invention is the result. Yet transfer from one to the other could take place. The images of baboons and scorpions as objects of cult in court circles are examples.[12]

The fact that we can work backwards in time at Elephantine from clearly identifiable temple remains to a natural feature urges us to label the original granite niche as the first shrine there. The small objects which had been left there at the beginning marked the visits of individuals who wished to leave something of themselves in a place which triggered inner contact with an imagined presence with whom perhaps transactions were possible. In time this developed into recognition of a named goddess (Satis) together with people whose job it was to guard, improve and administer the place, incorporated into the system of local administration.

Tell Ibrahim Awad[13]

Tell Ibrahim Awad, located in the north-eastern delta (Figure 2.5, p. 73), is the worn-down stump of an archaeological mound which preserves the remains of a provincial town whose name has been lost but whose beginnings extended back into the Predynastic Period. An excavation begun in 1988 exposed the deep foundations of a Middle Kingdom brick building at a level below that of the original floor and surrounding ground (Figure 3.6). As is characteristic of the Middle Kingdom, the walls are thick (up to 2.90 m) and enclose relatively small spaces. They define a rectangular building that seems to have stood within an enclosure wall. The Middle Kingdom layer seems not to survive over other parts of the site so it is not possible to judge to what extent, if any, this building fitted within a larger planned town of the period. The fact that a cemetery lay against one side does, however, point to the likelihood that it stood towards the edge of the

town.

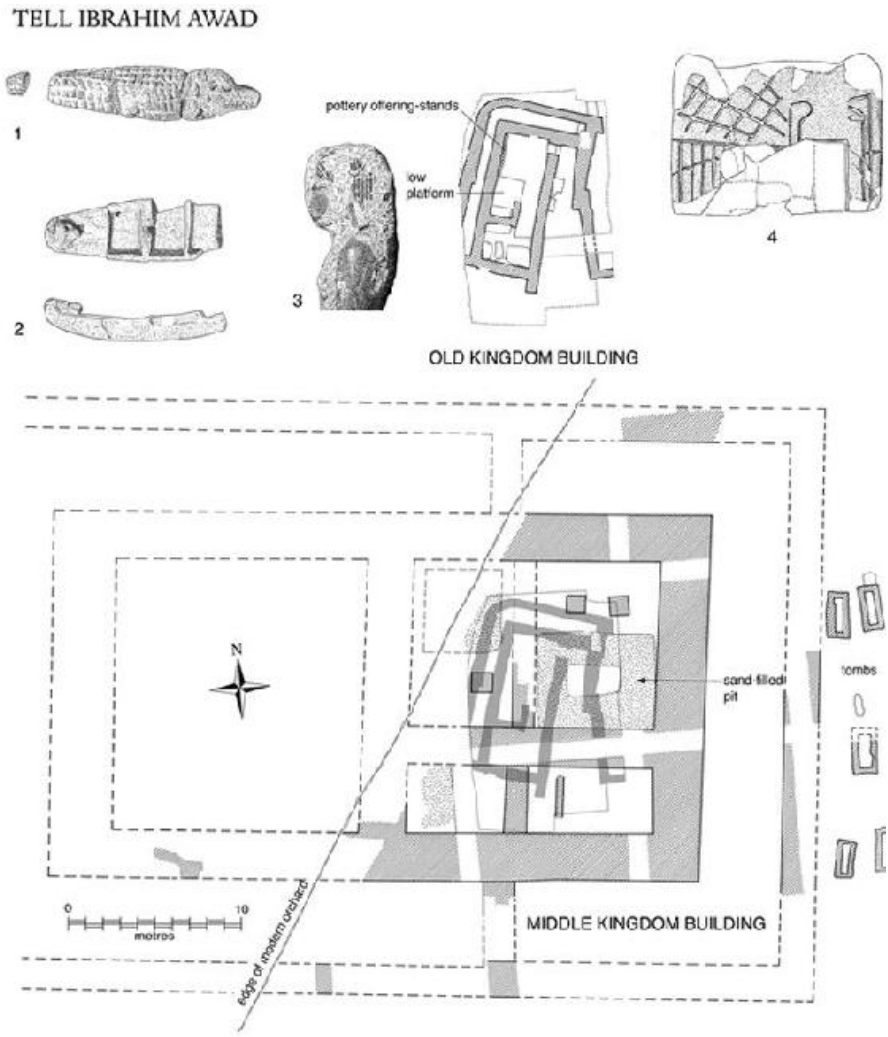


*Figure 3.6*Superimposed Old Kingdom and Middle Kingdom brick buildings at Tell Ibrahim Awad in the eastern delta. They have been identified as temples mostly on account of the objects found in the fill of soil. After D. Eigner, 'A temple of the early Middle Kingdom at Tell Ibrahim Awad', in van den Brink, *Nile Delta*, 70–1, Figs 1, 2; D. Eigner, *Ä&L* 10 (2000), 17–36; W.M. van Haarlem, *EA* 18 (2001), plan on p. 33. (1) Faience crocodile, length *c*. 19 cm. (2) Pottery hedgehog-ship, length *c*. 10 cm. (3) Ivory female figurine. (4) Faience model of a shrine, its door flanked by a pair of poles with streamers (?) at the top, the later sign for divinity. (1) and (3) after photographs in W.M. van Haarlem, *EA* 18 (2001), p. 33; (2) after W.M. van Haarlem, *JEA* 82 (1996), Pl. XX.1 and 2; (4) after W.M. van Haarlem, *MDAIK* 54 (1998), 184, Fig. 3.

The excavators discerned, both in the fragmentary plan and in certain associated features, sufficient reason for identifying the building as a temple. The features were a bed of sand beneath the main walls, and, almost straddling the east–west axis, a rectangular sand-filled pit (*c*. 7 × 5.60 m) over and around which were numerous limestone chippings assumed to be from the destruction of a small structure built of limestone blocks. Deeper excavation then revealed walls from a far more modest building, on a different alignment, and with a far less formal plan. This, too, has been interpreted as a temple or shrine, of the Old Kingdom.[14] Within an oblong chamber (8 × 3 m) a partition wall defined a tiny space (2 × 1.5 m) that partially surrounded a low platform. A row of pottery offering-stands had stood along one wall.

Scattered within the surrounding soil, buried in pits and left within some of the rooms were objects that, collectively, resemble those from Elephantine (as well as from other sites; see below). Numbering over 600, they include figures of humans and a variety of faience and ivory animals (largely carved from hippopotamus tusks), such as baboons (200 of them), crocodiles and hippopotamuses; also mace heads, gaming pieces, jewellery, faience wall tiles, natural stones in odd shapes and vessels deemed to be 'cultic'. Particularly striking are a hedgehog-shaped boat in pottery of a type known primarily from Elephantine, and models in faience of wood-and-matting shrines (Figure 3.6 (4)), buildings quite unlike the walled space in which they were found. The building and the objects, when taken together, have the potential to be a brick version of the Elephantine shrine, a cave-like place built on a plain (or did it occupy a mound which is no longer visible?). Because the settlement did not develop into a place of long-term patronage, expressed in part through carved stonework, we can give no name to a god or goddess honoured here.

Tell el-Farkha[15]

Tell el-Farkha is another of several early sites located in the eastern part of the delta (Figure 2.5, p. 73). As it survives now it covers around 4.5 ha and rises to 4.5 m above the surrounding fields. It comprises three separate low mounds to which the Arabic word *kôm* ('a lesser mound' or 'hillock') is applied, thus East Kom, Central Kom and West Kom. A major excavation programme, beginning in 1998, has revealed parts of an inhabited area and a cemetery, through

superimposed layers which extend from a time in the Predynastic Period (equivalent to the beginning of Nagada IIB/C, *c*. 3450 BC) to a time in the Fourth Dynasty. It is one of the sites where one can follow the transition from the cultural characteristics of the Lower Egyptian predynastic tradition to that of the Nagada tradition which was rooted in Upper Egypt.

Amongst the material found are many representational objects of a size that can be readily held in the hand, thus figurines. The materials are ivory derived from hippopotamus tusks, clay, faience and wood (although only the gold-leaf covering of two of them left them recognizable in the damp, saline soil). They show considerable variety in form, style and level of craftsmanship, and tended to occur in groups. We have already looked at the pair of gold-leaf covered male figurines (Figure 2.12, p. 84) which fit other portrayals thought to be of rulers. Along with two large flint knives and hundreds of carnelian and ostrich egg-shell beads, they were found buried beside a wall inside a room or courtyard on the corner of a mud-brick building complex on the East Kom, the date of burial being perhaps two centuries before the beginning of the First Dynasty.

The principal concentrations of objects were found on the West Kom, again within a mud-brick building complex now of the last phase of occupation, its abandonment dated to the middle of the First Dynasty (Figure 3.7). They occurred within defined spaces, one a room (W106) measuring *c*. 3 × 2 m, the other seemingly an L-shaped space (W211) *c*. 2.5 m wide, its plan not fully recovered. Many of the objects (in one case numbering 62) had been left inside pottery vessels which might have originally been buried beneath the floor. Other objects, including beads, were found loose within the earth. The objects as a whole include siltstone ('slate') palettes, pear-shaped stone mace heads and, most notably, figurines. With them, the makers have combined observation of the world around them with varying degrees of fantasy and have rendered them with great skill. The figurines of a scorpion and of a fish and of a woman holding a child follow natural forms. There is a fascination with dwarf humans, men and women, which had a long subsequent history in Egypt. In two subjects, however, nature and fantasy have merged: a snake with a human (woman's?) face, and a quadruped with bird's head and a probably lion's body (as in a griffin).

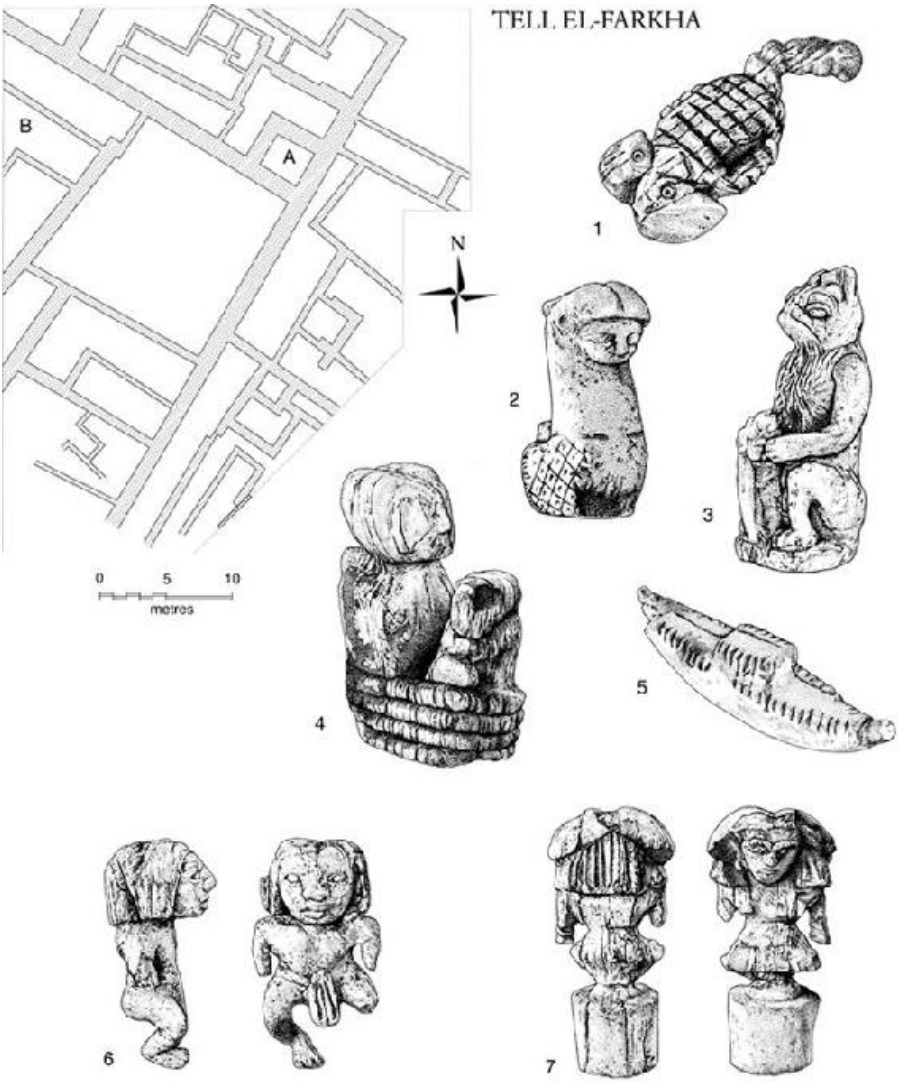


*Figure 3.7*Plan of the latest phase of buildings at the West Kom, Tell el-Farkha, from the end of the Predynastic Period. Areas A and B contained concentrations of objects, many of them figurines. Do they identify the spaces as 'shrines' and thus that the objects are 'votives'? After Chłodnicki et al., *Tell el-Farkha*, 178, Fig. 26. The accompanying objects made from hippopotamus tusk are a selection from one of these deposits, found in a pottery jar in area 'B', and are after ibid., 208–18, various figs. (1) Scorpion. (2) Snake with woman's face, height 2.4 cm. (3) Seated 'griffin' (bird-headed lion?), height 7.2 cm. (4) Woman seated in a basket and holding a child, height 4.1 cm. (5) Boat with cabin. (6) Male dwarf, height 4.8 cm. (7) Female dwarf, height 3.4 cm. The objects are in the Egyptian Museum, Cairo. Drawings by A. Boyce.

Meaning is one thing, purpose another. The places where the figurines and associated objects were found are subdivisions of a building of many spaces where purpose is hard to define. Neither in

their positions nor in their internal features do the rooms with objects appear to show features which distinguish them from others. Without the collections of objects the rooms would call for no special comment and, unlike at Elephantine, the abandonment of this part of the site means that there are no signs of how later generations regarded it (although the Central Kom continued to be occupied into the Fourth Dynasty, by which time, at Elephantine, a more recognizable shrine was appearing). Given that this is a significant time in the development of Egyptian perception and behaviour, when a latent part of people's psychology became formalized, eventually manifesting itself in places specifically constructed for communication with gods, we can interpret Tell el-Farkha as a place where the process was arrested at a relatively early moment. If we use the term 'shrine' for these enclosed spaces we should do so without imbuing them with attributes which only appeared later and at other sites.

The next two sites, Abydos and Hierakonpolis, offer narratives which are similar to that for Elephantine in that they belong to towns with important later cult associations although the contexts for the early material are harder to define.

Abydos[16]

As already mentioned (p. 86), the provincial town of Abydos probably came into existence close to the beginning of the First Dynasty. Late in the Old Kingdom the temple site which lay adjacent to the town saw a major phase of rebuilding, which represented a step towards formality (Figure 3.8). The main emphasis was on creating a new enclosure with a thick girdle wall. On the north-east side, towards the north corner, lay a stone-lined gateway bearing traces of the cartouche of one of the Kings Pepi of the Sixth Dynasty. A number of mud-brick buildings of modest size stood within the enclosure, none of them, by size or layout, being self-evidently a temple. Here we are put on a particular track by limestone stelae concerned with the administration of a temple ('mansion of god') of the god Khenti-amentiu ('Foremost of the Westerners', thus the spirits of the blessed dead, and portrayed as a jackal). They date to the reigns of Neferirkara, Teti and Pepi II (collectively *c*. 2282–2118 BC), and thus to almost the whole span of the Sixth Dynasty. One of them was found in place, directly in front of the stone-lined entrance to one of the brick buildings. It is natural to identify the building as the temple of Khenti-amentiu, despite its

modest appearance, a rectangle measuring 18 × 21 m, with internal subdivisions.

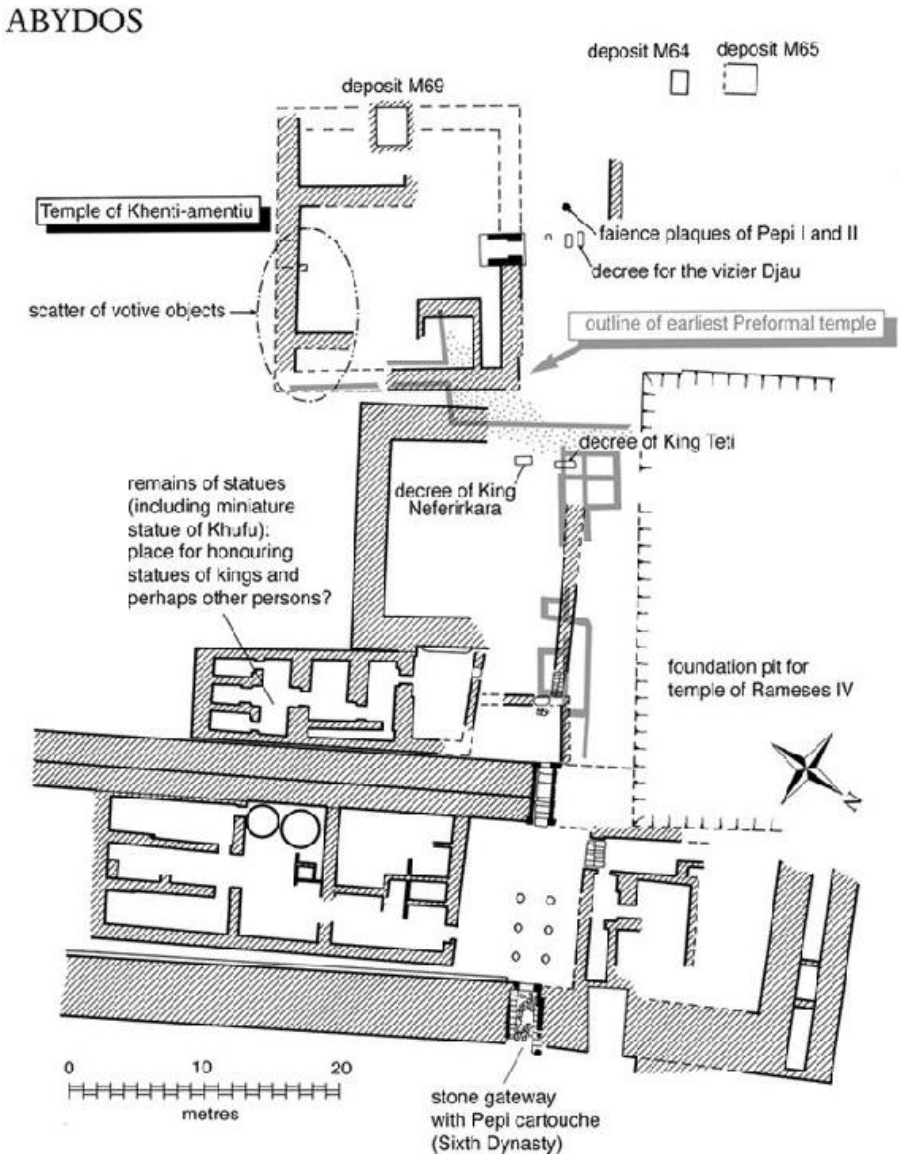


*Figure 3.8*Remains of the early temple of the god Khenti-amentiu at Abydos. The temple stood close to the corner of a heavily walled enclosure, surrounded by storerooms and other buildings. After Petrie, *Abydos* II, Pls L–LIV. The walls that appear grey are of an earlier period, associated with a bed of sand.

This same building also lay at the centre of a spread of small objects, mostly figurines. Some were found inside, and included

faience tablets and alabaster vases bearing the names of Pepi I and II. At a depth of 50 cm beneath the floor was a large deposit of ash and burnt earth containing 'hundreds of little twists of burnt clay'. Similar objects were found in an apparently Early Dynastic deposit beneath the New Kingdom temple at Armant.[17] Other small objects had been buried in nearby pits, one of them (pit M69) actually beneath the line of the wall of this late Old Kingdom temple. They consisted of human figurines, made mostly of ivory and faience, a large group of animal figurines mostly of faience, limestone and ivory, and models of pots, boats, portable shrines, fruits and flowers, which were practically all of faience (see Figure 3.5, p. 122). One of the human figurines was a beautiful ivory statuette of a king in jubilee-festival robe.[18] This material shares the same dating problem with the deposits from Hierakonpolis. It became separated from its context when the temple was rebuilt, and its Preformal style creates an impression of extreme age. It has, however, a close parallel with the material from Elephantine. Some is undoubtedly Early Dynastic, but other pieces probably extend the range into the Old Kingdom. By the time that the temple came to be rebuilt late in the Old Kingdom they were no longer actively required in the temple, so they were buried in the foundations.[19]

There is the implication, therefore, that this Sixth Dynasty temple had replaced something earlier. The structural remains that could be traced beneath the floor consisted, however, of only patches of sand and lengths of thin brick walls that do not join up to form a single coherent building. One part seems to consist of a rectangular courtyard from which a narrow brick-lined corridor leads off, recalling in a general way the basic ground plan of the Preformal temple at Medamud (see below, pp. 135–7). In the late Eleventh Dynasty and the reign of Senusret I the temple was rebuilt again, employing limited amounts of stonework, presumably set into walls of mud brick. All trace of this building had been destroyed in further rebuilding in the New Kingdom.

The Old Kingdom temple was one of many buildings, some of them houses, which seemingly filled the large walled enclosure, so turning it into an early example of an urban citadel that protected the community's main assets, the temple being one of them. Another of its buildings, which lay closer to the gateway, contained the remains of many statues of wood, and a tiny ivory statuette of Khufu, builder of the Great Pyramid. It could have been a supplementary place for honouring statues especially of kings.

One consequence of increasing court patronage and the involvement of the formalizing approach at Abydos was the change in the identity of the god to whom the temple was principally dedicated in the Old Kingdom: from Khenti-amentiu, a local jackal god, to Osiris, whose cult was to take on national significance. This aspect of the cult at Abydos, which exemplifies the re-codification of tradition, will be taken up a little later. However, as at Elephantine and Hierakonpolis, the range of votive figures in no way reflects either of these deities that the formal sources of the later Old Kingdom tell us were principally associated with the temple. One model of a portable divine image from amongst the votive collection shows a figure without any of the characteristics of either Khenti-amentiu or Osiris (Figure 3.17 (A31), p. 147).

Hierakonpolis

During the Old Kingdom, a walled town developed at Hierakonpolis (ancient name Nekhen)[20] over the site of the final nucleus into which the sprawling low-density predynastic settlement had shrunk (see Figure 2.8, p. 77). The area where the temple developed occupied the southern corner of the town. On the map, this is shown within a separate rectangular enclosure (Figure 3.9, and Figure 5.2, pp. 130 and 198), but its date is not settled. Several periods in this part are represented in a compressed stratigraphy that remains ambiguous. The area has been examined twice, first by a British expedition in 1897 and 1898 (J.E. Quibell, W.M.F. Petrie and F.W. Green), and then by an American expedition of the 1970s and 1980s (W.A. Fairservis). One aim of the latter was to clarify the results of the former, but this proved to be difficult, in part because a rise in the water table had made the lower levels virtually inaccessible.

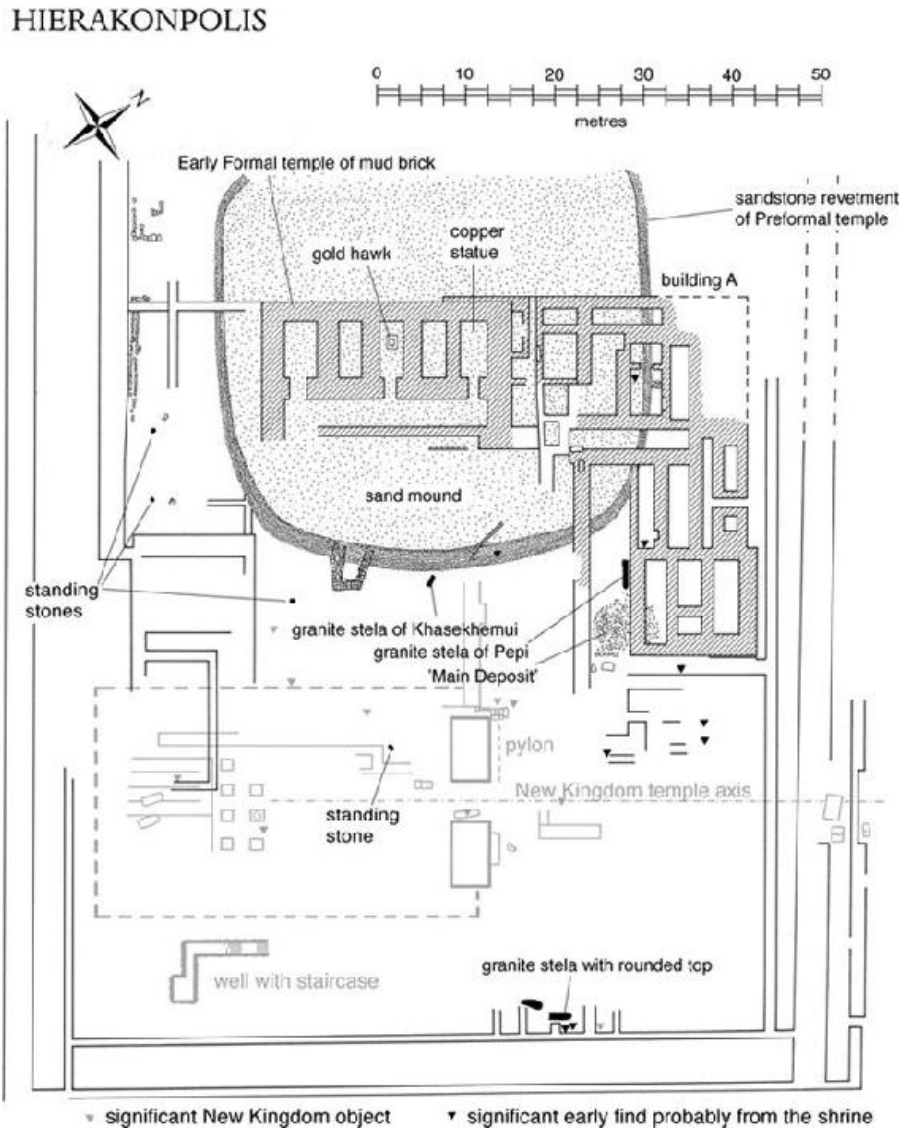


*Figure 3.9*The temple remains at Hierakonpolis (see also Figures 2.8, p. 77, and 5.2, p. 198). The scant remains of the Mature Formal temple (Eighteenth Dynasty and later) are in grey. For the earlier brick buildings (cross-hatched) I have preferred the outlines of Quibell and Green, *Hierakonpolis* II, Plate LXXII to those of the later Fairservis expedition, published in Fairservis, *Hierakonpolis 1978*, Fig. 6. In the former time the buildings were much better preserved, and the latter plan is little more than a sketch. The two are difficult to reconcile. Fairservis was of the opinion that building A was later (and was the foundations for a New Kingdom stone building), whilst B was of the Old Kingdom (on account of abutted settlement walls of this period).

The contents of the enclosure fall into roughly three parts. That on the north-west is largely blank, because the ground had been denuded down to below the main building levels. That in the middle is

occupied by part of a dense arrangement of brick walls laid out on a rectangular plan, and overlying a low artificial mound of sand, measuring 48 × 48 m and 2.3 m high, kept in place by a revetment of small roughly cut sandstone blocks. That on the south and south-east contains fewer remains, but amongst them are most of the pieces that derive from a stone temple of the New Kingdom which faced north-eastwards, towards the river, and had initially been built by Tuthmosis III. It includes the remains of a pair of pylons from an entrance, the brick foundations for columns, and a scatter of foundation deposits. Possibly a monumental entrance doorway was added in the Ptolemaic Period. As was usually the case, the New Kingdom builders had removed the walls of earlier constructions to make way for their own. The brick walls of the adjacent middle part of the site are at the same level as the Eighteenth Dynasty temple. Are they of the same period? Although their overlap with the Eighteenth Dynasty temple is slight, it does occur, and seems to bear no relationship to it.

A tempting (though by no means inevitable) interpretation is that two main periods of temple development at Hierakonpolis lie side by side instead of, as was more often the case, superimposed one over the other. Thus the brick walls of the central part are the remains of a planned Middle Kingdom layout of a temple and its ancillary buildings (representing its Early Formal phase) whilst alongside it King Tuthmosis III subsequently added a Mature Formal stone temple. Was the adjacent site so important that it was preferable to leave it visible, the earlier brick buildings perhaps reduced to a mound suggestive of great antiquity (mounds in later periods were sometimes seen as sacred in their own right)? The brick building at its centre may well be the actual shrine, for which the Middle Kingdom supplies the chief parallel (at Qasr el-Sagha in the Fayum) although some see it as earlier.[21] In the central chamber a brick-lined pit lay in the floor, covered with a basalt slab. The pit contained a complete divine image: a hawk of thin copper plate, with head and plumes of gold, exquisitely made, yet small in scale (Figure 3.10).[22] A second deposit was found beneath the floor of the end chamber to the north. This contained two similar copper statues of standing males (one inscribed for Pepi I), one of the dark stone (greywacke) statues of King Khasekhemui of the Second Dynasty, and a fine pottery lion probably of the Early Dynastic Period. These pieces are all in the formal 'classic' Pharaonic style. The straightforward explanation (though not necessarily the correct one) is that the statues had stood within the chambers in which they were

buried. This would identify the building as a temple containing an image of Horus in one chamber and statues of kings in another (with the implication that the lion statue also represented a ruler).

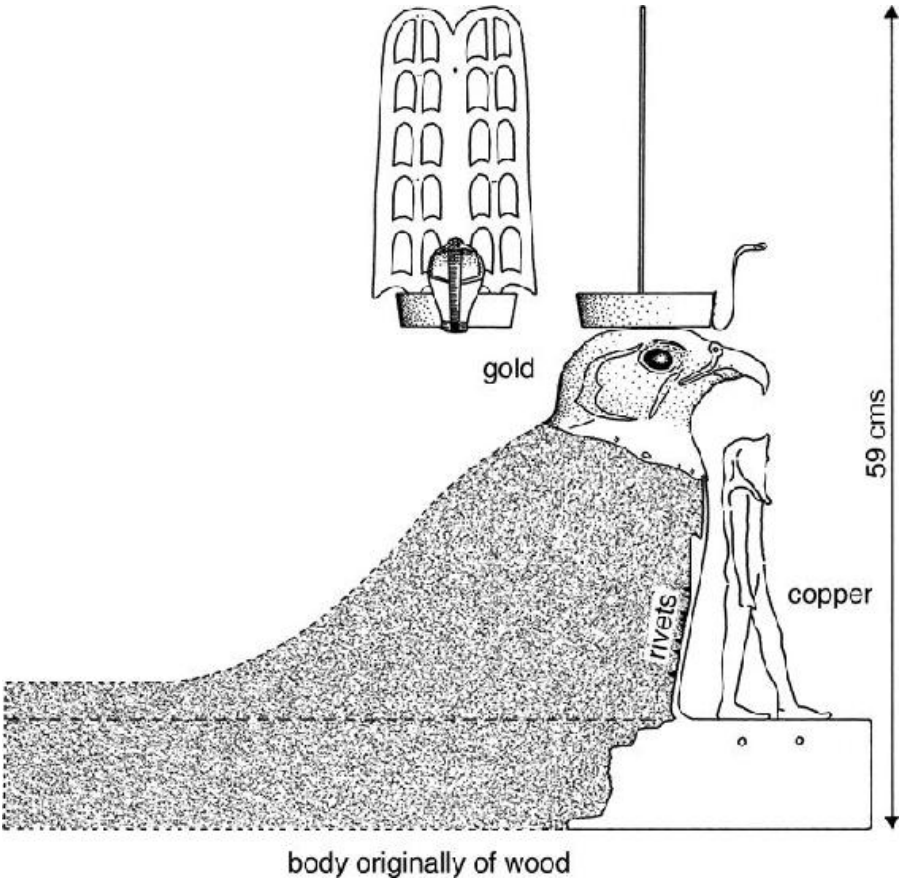


*Figure 3.10*An early divine image: the falcon god Horus of Hierakonpolis protecting the figure of a king. Originally of wood (now perished), sheathed in copper and with a gold head. Found buried in a pit in the sanctuary of the Early Formal Temple at Hierakonpolis (Figure 3.9). After Quibell and Green, *Hierakonpolis* II, Pl. XLVII; Quibell, *Archaic Objects*, Pl. 65.

Lying not far away in the ground beneath the walls, but in an ill-defined heap instead of in a pit, was the 'Main Deposit'. Part of it consisted of important artistic material: 'slate' palettes (including the Narmer and Two-dog Palettes, Figure 2.10, p. 81, and Figure 2.15, p. 91), carved mace heads, ivory statuettes, and other ivories with designs in relief, a fragmentary limestone statue of the same King Khasekhemui (see Figure 2.18 (5), p. 95 for the design on the base), and stone bowls of his reign (Figure 2.18 (4), p. 95, is a design on the shoulder of one of them). But numerically preponderant were small

objects, often crude in execution. The commonest were mace heads, little shallow alabaster dishes, other vessels in stone and faience, including model vessels on tall stands, and animal figurines in various materials: monkeys, including one hugging its young, birds, frogs, hippopotamuses, dogs, a boar, gazelle or ibex, and numerous scorpions or scorpion tails. The material hardly corresponds with the divine attribution of the temple to the falcon god Horus of Nekhen in historic times.

The Main Deposit lay beneath the walls of part of the brick building which is identified above as the Early Formal temple. Beneath another part of it lay the greater portion of an even earlier structure: the circular mound of clean desert sand encased within a sloping wall of rough sandstone blocks already mentioned.[23] Its stratigraphic position implies that it was created late in the Predynastic Period. Old Kingdom houses had been built around it, but had not encroached upon it, so that it may well have stood visible and in use for a part of the Old Kingdom at least. Around it had been erected a number of free-standing stone pillars, one of which may have been in the form of a tall striding man (it was found reused in a different part of the site). These introduce a very different idea as to how a significant space could be laid out, seemingly ignoring the linear journey between the hidden and the revealed. The last chapter illustrated a range of early ideal shapes for shrines, made from timber and matting. In neighbouring regions outside Egypt, to the south, south-west and north-east, however, there is evidence for a widespread interest in marking significant places by means of standing stones, either individually (where they were themselves the focus of interest) or arranged in circles (where the thinking was more complex). The presence of standing stones around the central mound at Hierakonpolis shows that this tradition had a role in early Egypt as a way of creating a boundary that dispensed with a surrounding wall.

One way in which such stones were construed will be discussed later in this chapter, in a section on the *benben*-stone of Heliopolis, the principal survival into later times of significant standing stones (see p. 141, with Figure 3.14). In other contexts (e.g. those beside the simple superstructures of the early kings on the Umm el-Qaʾab) they bore royal names and served as markers of personal identity. When in the form of statues, they perhaps acted more as guardians (e.g. those at Coptos; see below, p. 133 and Figure 3.11, and the one from Hierakonpolis). Certain slabs found in the vicinity of the Hierakonpolis mound may well represent further variations from

dynastic times. One was a plain, round-topped granite stela, 2.60 m high (Figure 3.14 (3), p. 142), similar to the free-standing stelae which stood in open courts in the mortuary temples attached to certain of the Old Kingdom pyramids (see also Figure 2.23, p. 106). A second was a granite 'door jamb' of King Khasekhemui on which was carved a scene of the temple foundation ceremony,[24] and a third belonged to one of the kings of the Sixth Dynasty named Pepi.[25]

Did anything originally stand on top of the mound? This question, so important to understanding how such a structure was viewed and used, is impossible to answer from direct evidence because a later building occupied the same ground. The options are: nothing at all, a single post or tall stone, a building of timber and matting or one of mud brick. Most of the distinctive objects and one royal statue that formed the Main Deposit were, it should be noted, found beside the mound, not on top. It was clearly a place organized differently from the shrine at Elephantine. The range of deposited objects extended beyond those that were the staple at Elephantine to include some that honoured early kings and their victories. We must be careful with the way that particular words push us towards a more restrictive meaning than the range of characteristics that we are trying to understand. 'Shrine' and 'temple' are two such words. The Elephantine evidence does seem to show the evolution of a shrine, as we normally use the word, from a casually selected place of inner communication. Hierakonpolis offers a more complex set of possibilities, especially once the 'ceremonial' site HK 29A is taken into consideration (see below, pp. 149–51). The combination of ceremonies surrounding a locally based king and the early identification of a god of sky and warfare (Horus of Nekhen) honoured at Hierakonpolis perhaps created a centre with functions that went beyond what we mostly expect from the words 'shrine' and 'temple' (although this is also true for many later buildings in Egypt that we habitually call 'temples'). We should not forget, however, the scene of temple foundation of the late Second Dynasty mentioned in the last paragraph.

The final two sites, Coptos and Medamud, have so far not produced collections of objects equivalent to those at the sites already considered. They extend considerably, however, our knowledge of the range of ideas and practices centred at sites which were in the process of becoming temples to gods.

Coptos[26]

Once again the main source for this site, 38 km north-east of Thebes, is an early excavation report, by Flinders Petrie, who dug out the temple area in 1894. Even by that time most of the temple masonry had disappeared. The remaining traces suggest a familiar combination: a Ptolemaic portico on the front of a stone temple of Tuthmosis III of the Eighteenth Dynasty – thus 'Late Formal' added to 'Mature Formal'. Despite the importance of the cult of Min (whose area of prestige extended to the eastern desert including the Wadi Hammamat, Figure 3.1, p. 113), the temple was never developed to be particularly large. Petrie recognized no earlier architecture at all, but it is not clear what weight should be given to this. Within the soil he did discover a range of figurines, made from stone or poorly baked clay. They seem to be products of a local tradition different in style from much of what has so far been illustrated. Faience was not part of it. The clay figurines included humans, some of them carefully modelled statues, others 'very roughly pinched into form with the fingers, and have details marked with scored lines'. Crocodiles were another subject. Also made from pottery were ring-stands with relief designs. On one the design included hunting dogs and a pair of lotus flowers tied together.[27]

The most remarkable objects found were torsos of three colossal limestone male figures, holding a wooden staff or similar object (now missing) in one hand, and erect penis (carved separately in stone and now also missing) in the other (Figure 3.11). A fourth piece was a broad head, heavily bearded yet bald. Their original height was probably around 4.1 m, implying a weight of nearly two tons each. Their overall shape, of a flattened cylinder, gives to them something of the character of a stela. In their present broken and decayed state, they now look crudely fashioned, but where patches of their original surface survive it can be judged that they originally had carefully finished surfaces which bore a good deal of subdued modelling of anatomical detail. The figures wear a broad girdle, and down the right side of each a series of symbols had been carved in relief on a slightly raised panel. They cover an enigmatic range of subjects: a stag's head, *pteroceras* shells, the 'thunderbolt' emblem of the god Min on a pole, long branching trees (probably), an elephant, a hyena and a bull, all with feet resting on hills. As a group, they belong to a vocabulary of symbols in use during the period immediately prior to the First Dynasty, the period of 'Dynasty 0', though quite what they represent is hard to establish. Are they, for example, the names of clan-like subdivisions of the society of this part of Upper Egypt?

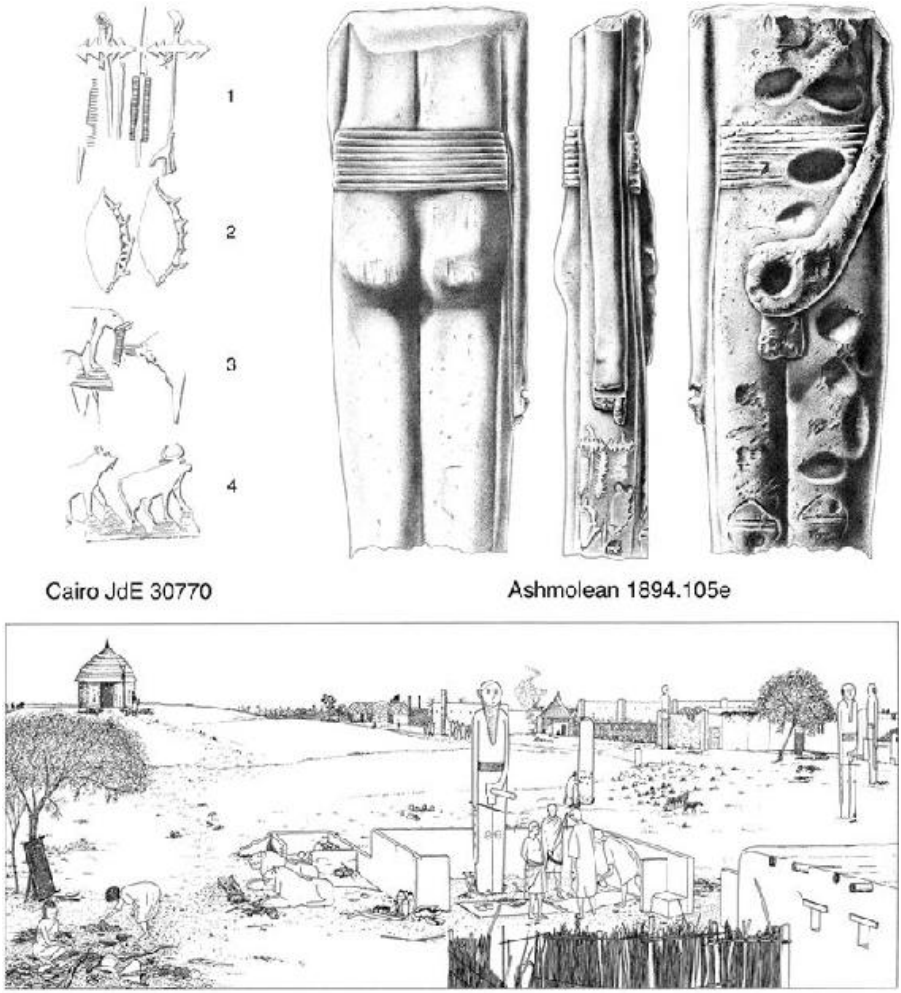


*Figure 3.11*Preformal art on a colossal scale: the limestone statues from Coptos. *Top right*. The torso and upper legs from one of the pair in the Ashmolean Museum, Oxford, no. 1894.105e. Its height is 1.93 m. Original drawing by A. Boyce. *Top left*. Carvings on the side of the colossus in the Egyptian Museum, Cairo, JdE 30770: (1) A pair of standards topped with a 'thunderbolt' emblem and feather alternating with what might be a pair of saw-bones from the Red Sea saw-fish; a small stork or ostrich has been added. (2) A pair of Red Sea shells. (3) An elephant, its feet resting on conical hills, and a bird (rear part only preserved, perhaps Horus above a spike; see Figure 2.11 (1), p. 82. (4) A lion or hyena and a bull, their feet resting on conical hills. *Below*. Reconstruction of the original setting of the Coptos colossi. Reproduced from B. Kemp, A. Boyce and J. Harrell, *CAJ* 10 (2000), 211–42.

The colossal figures represent a substantial achievement of organization. They are large masses of stone brought from quarries that lay some distance away, a likely site being El-Dibabiya, 70 km upstream. They remind one of the well-studied case of the colossi on Easter Island in the Pacific Ocean, quarried and erected by people

with a technology and organization probably not much different from that of the later Predynastic Period in Egypt. The vital element is the will to do the work: simple technology and communal effort do the rest. There had also been companion pieces of animal sculpture – crouching lions and a bird – rendered in a highly stylized way. On stylistic grounds the lions can be ascribed to most probably the early First Dynasty.[28]

The disposition of the standing stones at Hierakonpolis offers a guide to how the Coptos colossi might have been arranged, not as a centre of attention, but as an arc of guardian figures surrounding a central feature of interest, perhaps a simple hut shrine on a low natural mound (Figure 3.11; Figure 3.13 (3), p. 140, illustrates a tradition of an archaic hut shrine peculiar to Coptos). Petrie and others observed the remains of the mound, and it was evidently a distinctive feature of the local landscape in the Sixth Dynasty, to judge from a mention of it in a text of that time.[29]

Since their discovery the colossi have seemed a particularly alien and 'primitive' product of the Nile valley. Yet that is because we ourselves see them with hindsight, our aesthetics moulded by what, in the end, became the sole significant tradition in Egyptian art. The colossi communicate powerfully in their own way, and represented to their creators and admirers an emotional and aesthetic satisfaction of a different kind, in a style that allowed for the existence of shapes not fully determined by nature, a unique achievement of preferred local traditions. It was a style that could have been maintained or developed further into a tradition of somewhat surreal renderings of forms. Instead, the line of development was subsequently turned towards a far more literal style of art that delineated perfect natural forms and helped to cut the Egyptians off from their own roots.

For how long were the statues accepted as objects of veneration? The conservative atmosphere of local temples in Upper Egypt, to judge from the archaeological record, could have accommodated them until a royal edict came ordering their replacement, which could have been at almost any time in the Old Kingdom. Furthermore, even after they had been formally abandoned they probably remained a source ofpower to local people. They bear on their bodies many smooth rounded depressions probably from people grinding away to obtain magically efficacious dust. Many of the depressions can have been made only whilst the statues were lying on the ground.

Medamud[30]

Medamud (ancient name, Madu) was a provincial town with a temple lying 5 km north-east of Karnak at Thebes. In historic times it was the cult centre for the falcon god Menthu, another god with warlike characteristics. Here we can find, from the superimposed layers of architectural foundations, the four main periods of temple building. The Eighteenth Dynasty saw the erection of a new all-stone temple in the Mature Formal style. In the Graeco-Roman Period a broad courtyard in stone in Late Formal style was added to the front, with a double colonnade. A stone wall had extended back from this to embrace the whole sacred precinct. Beneath this stonework and on the south side of the enclosure, excavations in the 1930s revealed a layer of mud-brick foundations. No final report on the last and most vital seasons, those of 1938 and 1939, has been published, but one preliminary report does contain a general plan (Figure 3.12). It shows a rectangular enclosure with external dimensions of 95.5 × 60 m. The girdle wall was 5.5 m thick. One entrance lay through the middle of the east side. The interior was densely built up with rectangular units, carefully pre-planned in the formally rigid style of the Middle Kingdom (see Chapter 5). Only the foundations have been preserved, below threshold level, so that the positions of doorways have been lost. Thus whilst we can distinguish individual units we cannot tell how their individual rooms communicated with one another. In general they seem to be surrounded by a more or less continuous street running along the base of the wall, as in the Middle Kingdom fortresses constructed in Lower Nubia (see Chapter 5). The solidity of the wall even gives to the enclosure a fortress-like appearance, appropriate when one considers later sources which make more explicit the protective character of temple enclosure walls (Figure 6.3, p. 252).

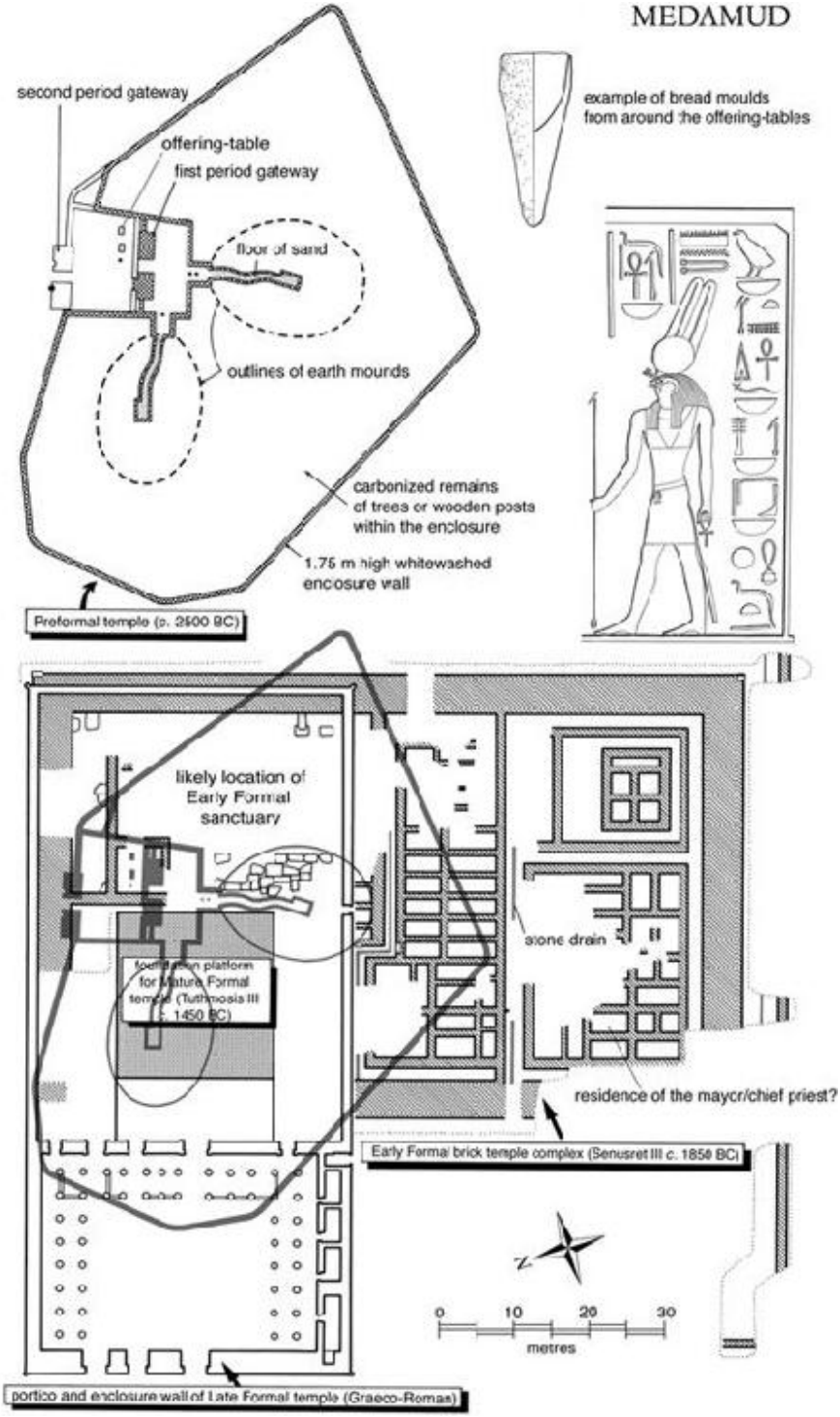


*Figure 3.12*Two and a half thousand years of temple worship: the temple site at Medamud, showing the superimposed layers of architecture. After C. Robichon and A. Varille, *CdÉ* 14, no. 27 (1939), 84, Fig. 2; Robichon and Varille, *Temple primitif*,

folding plan at end. The image of the god Menthu comes from a lintel belonging to a monumental stone portal found on the site, made in the reign of Senusret III and taken over by a later king of the Thirteenth Dynasty, one of the Sebekheteps. After F. Bisson de la Roque and J.J. Clère, *Rapport sur les fouilles de Médamoud (1927)*, Cairo, IFAO, 1928, Pl. VI.

The space to the north is the part where the later temple building had been concentrated, destroying most of the brickwork of this level in the process. The Middle Kingdom temple at Medamud had evidently stood in this location, but we have no direct evidence for its plan. Many stone architectural elements of this date, reused in later constructions, had been discovered during earlier seasons of excavation. These included columns, Osirid royal statues, door elements and statues. Many blocks came from two huge portals that may have stood in the brick enclosure wall. As far as one can tell from the reports, however, there is insufficient masonry to account for a Middle Kingdom temple whose walls were of stone block construction. The walls would have been mostly of mud brick (in Figure 3.12 the area has been left blank for this phase). Where the foundations for walls in the southern part are preserved the plan suggests storerooms and perhaps one or more large houses for senior figures. Men in charge of towns at this time, with a title which it seems appropriate to translate as 'mayor', commonly also held a title which put them in charge of the temple. The powerful bureaucratic building machine of the Middle Kingdom could here have been applied to rendering into concise architectural form the local structure of power. Medamud would then become an example of the temple citadel in the Middle Kingdom. The independent rectangular building in the south-west corner could even have been the mayor's residence, though at 22 × 27 m it is only a quarter of the size of one of the large Kahun houses (60 × 40 m; see Figure 5.11, p. 214).

This Middle Kingdom intervention had left behind in the underlying ground traces of a yet earlier set of structures that challenges our preconceived images of Pharaonic culture, rather as do the Coptos colossi but in a different way. This was excavated in 1939, and again is the subject of only a preliminary report.[31] A brick wall had enclosed an irregular, polygonal plot of ground, 83 m across at its widest point. The wall and its associated buildings stood on alluvial soil that had evidently not been built on before, although it contained a few prehistoric implements. The wall had enclosed what was interpreted as a grove of trees, its presence deduced from 'a layer of ash' in which, at certain points, there was 'the dark mass of a burnt

tree trunk' missing its roots. But could this have been an upright wooden post, a counterpart to a standing stone? Also within this irregular area two oval structures had stood, inferred from negative traces on the ground. It was thought they had been simply mounds of soil. A winding corridor of brick, less than 1 m wide, passed to a chamber in the centre of each mound, the floors covered with fine sand. The corridors led from a courtyard by means of a vestibule in each case. Pottery supports for offering-basins or incense-burners stood in these vestibules. The courtyard was closed by a wall containing an entrance flanked by two small brick towers, and there is a temptation to restore the towers as pylons, so making them the earliest examples from the Nile valley (though at just over 3 m wide they are unlikely to have risen much above human height). Subsequently an outer court was added and the towers were replaced by a new pair further to the north. The emplacements for one flagpole were in front of each of the new towers, in one case represented by a circular stone support. This outer court contained two rectangular brick pedestals, covered with ashes. Were they offering-tables or did an image stand on them?

No inscriptions were found relating to this curious building, but pottery seems to date it to the latter part of the Old Kingdom. The reports also make no mention of the finding of figurines or of other material comparable to the groups considered so far, nor have traces of an early settlement (apart from the few flint implements) been reported. It is possible to interpret the twin mounds in terms of an idea expressed in later times, which took the concept of the primaeval mound that had first appeared above the waters of chaos as a symbolic source of regenerative power, including new life beyond the grave. But no later inscriptions link this particularly to Medamud and, as always, we should be cautious in making interpretations using sources from much later times. It still remains the most striking example of Preformal architecture from Egypt. Its date, well within the historic period, is an important reference point for other sites. It adds credibility to historic datings for some of the other material discussed here, and is particularly useful in interpreting the architectural remains at Hierakonpolis.

The evidence we have just considered documents a unique time in Egypt when the elements of one key characteristic of a complex society came together. This is the setting aside of special places where the gods (and statues of human figures of authority) could be encountered and honoured in a way that was parallel to what was

proper for living rulers (in their transcendental aspect), namely, the combination of material gifts and formalized deferential behaviour (Figure 2.22 (G), p. 103, captures a moment of this from the beginning of the First Dynasty). Although a common dynamic was at work throughout Egypt, how it manifested itself varied from place to place. The result was a mingling of local traditions with elements common to many places. Somewhere, whether only around the royal residence or more widely distributed, groups of thoughtful, creative persons were working out the formal approach to design which we identify as quintessentially Pharaonic and which we begin to recognize in some of its manifestations during the Early Dynastic Period. It was not applied in a wholesale programme of replacement throughout the country, however. In provincial towns, buildings and objects either inherited from the past or created in styles of the past which allowed communication with gods and other imaginary beings continued to hold interest for a long time. The reasons for the slow and piecemeal progress of transformation may well have included limitations in court resources. For a long time those resources were concentrated on pyramid building and court cemetery construction.

The timescale is no mean one. The beginning of the dynastic period is currently set at *c*. 3085 BC and the end of the Old Kingdom at *c*. 2117 BC. Something like a millennium is involved at some of these sites. It means that for about a third of its history, Pharaonic Egypt was a country of two sources of cultural creativity: self-definition versus academic format, almost amounting to two cultures.

The roots of formal culture

The key to understanding formal Egyptian visual culture – architecture as well as art – and its remarkable homogeneity through three thousand years lies in the concept of the ideal type. This is a universal characteristic of the mind. We all have an image in terms of our own cultural experience of what, for example, a traditional king should look like, or a desirable residence, or a proper place of worship. Modernism in art and architecture has been directed towards breaking these ideal types and showing that within the imagination there need be no stereotypes. A different attempt to break visual stereotypes is found in Islam. God is to have no visual image at all, and is to be encountered through a multiplicity of names. The

Egyptians were at the other extreme. The ideal type, the visual image of what constituted a proper form, was elevated to the pinnacle of intellectual and aesthetic desirability. Because it was centred in the art of the court, the prime source of patronage, it was a self-perpetuating ideal, automatically selecting and promoting those artists with a natural aptitude for absorbing the range of ideal types into their artistic consciousness and skilled in the translation of these types into the precise graphic style that was so admired.

The history of writing in Egypt aptly illustrates the power that visual archetypes had. The first short groups of hieroglyphs used as writing occur at the transition to the First Dynasty. The signs are pictures of objects that conform in style to the developing canon of formal art. Properly drawn hieroglyphs were not, however, very suited to the rapid writing that is needed for letters or administrative documents. By the Fourth Dynasty, or perhaps before, the Egyptians had developed a more rapid form of writing which we call hieratic (Figure 4.1 and Figure 4.3, pp. 168 and 171, are examples, as is Figure 6.15, *bottom*, p. 284).[32] Individual hieroglyphs were reduced to a few easy strokes of the reed pen, and sometimes run together into groups. Hieratic changed its style over the generations, so that scholars can date texts to within certain limits by handwriting. Some good scribes, particularly in the later New Kingdom, developed elegant flourishes in their handwriting. But in no case can we honestly claim that this represents calligraphic art as developed, say, by traditional Islamic or Japanese culture. The reason is simple: the writing that demanded care and attention was hieroglyphic writing. Although more signs were added from time to time the ideal type never changed. It was the accurately delineated natural form as pioneered in the late Predynastic Period. The artist who wished to lavish his talents on hieroglyphs did so by working harder at the internal details of outlines that it would have been unnatural and improper to change.

The Pharaonic art style is relatively easy to describe and, to judge from the scale of the ancient output, it was relatively easy to acquire, given that there was every incentive to do so. A good artist was amongst the official, scribal class. We can select three essential elements. Whole compositions were given a markedly linear format through subdivision by horizontal lines from which individual figures spring (e.g. Figure 7.5, p. 308, where some of the base lines are modified to convey the uneven terrain). The resulting bands or registers of figures portray themes, but the sequence of registers could contain a more general element of order: of space progressing away

from the viewer although no thought was given to diminishing the size of figures with distance; or of time, in a sequence running vertically upwards, the earliest at the bottom. The second element, which also relates to overall composition, is the intimate connection between figures and accompanying hieroglyphic writing. Because hieroglyphs retained their original natural forms and were drawn to the same conventions as other elements in a picture, texts and pictures combined harmoniously into a single channel of communication. This is most apparent when signs are worked emblematically into the actions of the scene, as illustrated by the El-Lisht throne bases (Figure 2.3, p. 67). In the Early Dynastic Period hieroglyphs and pictorial groups tended to mingle more equally than later, when the balance changed and hieroglyphs became more of a commentary upon a dominant pictorial scene.

The third element concerns the conventions of the individual figures, be they humans, animals or pieces of furniture. Each figure or each major component part of a figure is reduced to a characteristic profile, and if necessary recombined to produce a composite image which does not offend common sense too much. For an ox the reduction was into three parts: side profile of the body, front profile of the eye and front profile of the horns. The human body was similarly treated. For birds the shape of tail feathers was profiled as if seen from above. (Examples of all three are in Figure 7.1, p. 299, although the birds' tail feathers are damaged.)

Because of the limited subject matter and format of Egyptian art, both wall scenes and statues, the reproduction of ideal types was a straightforward matter. Indeed, for certain elements, primarily the proportions of the human figure, a specific canon of proportions was devised which, from the Middle Kingdom onwards, related the parts of the body to a grid consisting of 18 squares from the soles of the feet to the hairline.

The aim of the artist was to render the elements of his pictures truthfully and informatively. The subject matter itself, however, portrayed reality only within frames of reference taken from a world of ideals stored in the imagination. In the case of scenes where gods are portrayed this is self-evident. But Egyptian tomb art also sought to record an eternal environment for the deceased tomb owner. The scenes that were selected created a world of banquets with friends, of hunting parties, and of overseeing the affairs of a country estate that included busy craftsmen. It is easy to conclude from tomb pictures that most ancient Egyptians of all ranks lived in the country, in a

society without towns and cities. Yet the archaeological record shows that this was not the case. By the latter part of the Old Kingdom densely settled walled towns had grown up in numerous places, sufficiently so as to suggest that a mature urban framework existed, and that for most educated Egyptians the town provided the basic experience of living, even though a few had country estates to which to escape. But this had no part in dreams of an ideal world, which was that of a peaceful agrarian existence. Such scenes are the staple of the tomb of Ankhtify at Moʾalla, from the early First Intermediate Period, despite the written narrative in the same tomb of civil war and famine which find no reflection in the pictorial decoration.[33] Egyptian art (and, as we shall see, architecture also) was a carefully and deliberately constructed style. It was not, however, built upon an empty cultural landscape, but over a pre-existing culture that, if Pharaonic Egypt had advanced no further, we would recognize and study as a viable tradition in its own right. The creation of Pharaonic art and its gradual expansion as a medium of communication involved a complex interplay with the Preformal tradition, selecting some elements and rejecting others. Two examples will illustrate this. The first concerns the iconography of the god Min.

In the formal Pharaonic scheme of gods Min had a prominent place as a god of the eastern desert and also, in a somewhat contradictory way, of procreation, with an important centre at Coptos. In the classic iconography he is depicted as a swathed standing male figure, holding a flail aloft in one hand (symbolizing the power to punish and avenge) and grasping the root of his erect penis in the other (Figure 3.13). His headdress is a pair of tall plumes. Other distinguishing attributes are a strange tall version of the primitive tent shrine (see below) and a bed of growing lettuces, the milky sap of which was apparently interpreted as the god's semen. He was also given an emblem on a carrying-pole, an object still not positively identified but called conveniently a 'thunderbolt'.

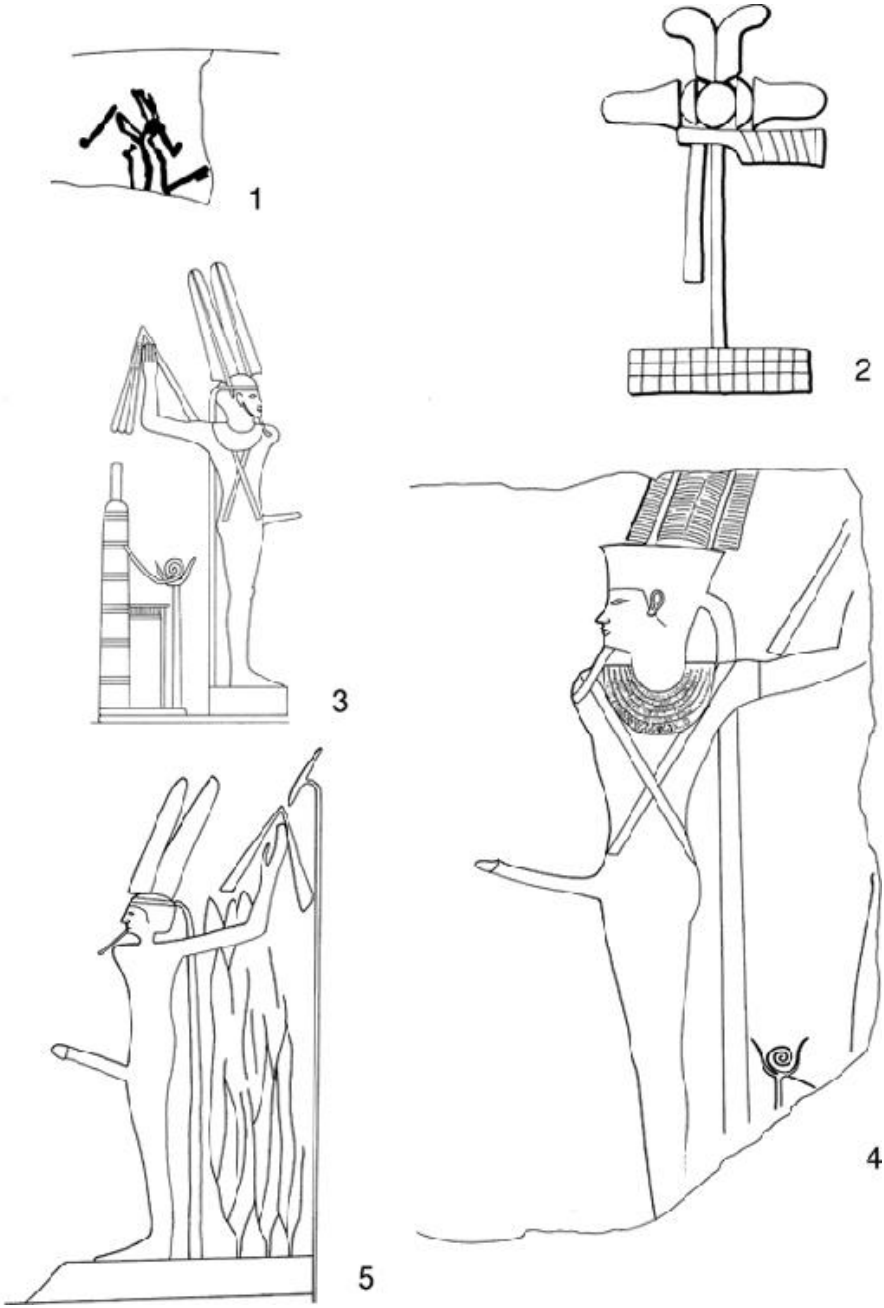


*Figure 3.13*The formalized images of the god Min. Nos 3–5 exemplify the classic image of Min as fertility god, adding to the ideal anthropomorphic image of god the elements of erect penis and brandished flail derived from the Coptos colossi (Figure 3.11, p. 134). The tall plumed crown is also common to the image of the god Amun from nearby Thebes. Behind Min in no. 5 is a stylized bed of tall lettuces, their white sap regarded as a symbol of semen; behind no. 3 (and originally behind no. 4) is a depiction of a tent shrine (or hut shrine) peculiar to the Min cult: a tall cylindrical tent linked by a rope to a staff topped with bovine horns (the basis for the

reconstruction in Figure 3.11). No. 5 is from a decree from the Coptos temple of the reign of Pepi I of the Sixth Dynasty (*c*. 2265–2219 BC), after R. Weill, *Les décrets royaux de l'Ancien Empire égyptien*, Paris, Geuthner, 1912, Pl. VII; no. 4 is from the same site, but of the reign of Senusret I of the Twelfth Dynasty (*c*. 1974–1929 BC), after Petrie, *Koptos*, Pl. IX; Stewart, *Petrie Collection* 2, Pl. 39. No. 3 derives from a kiosk of Senusret I at Karnak, after Stevenson Smith, *Art and Architecture*, 92, Fig. 162. The earliest recognizable image of Min in the formalized tradition is no. 1, an ink drawing on a sherd from a stone bowl from the tomb of King Khasekhemui of the Second Dynasty (*c*. 2611–2584 BC) at Abydos, after Petrie, *Abydos* I, 4, Pl. III. 48. No. 2 is the 'thunderbolt' symbol of Min also used for the name of the Coptos nome. It was the only one of the symbols carved on the Coptos colossi (see Figure 2.11 (1), p. 82), which was taken into the formal canon of images used for Min. This example is from the Valley Temple of Sneferu at Dahshur (*c*. 2520–2470 BC), after Fakhry, *Dahshur Reliefs*, 20, Fig. 9.

This stock set of images had been codified by the late Old Kingdom. Indeed, the basic image of the god Min himself appears as early as the late Second Dynasty.[34] The Preformal colossal statues found at Coptos provide us with some of the raw material from which the classic stereotyped image was fashioned. We can see how the court systematizers went to work. The basic pose was retained, but details and overall style were remodelled to produce a variant of the single standard image of a god that the court style of art dictated. Thus, for example, the distinctive appearance of the head and thick long beard were discarded. A number of emblems were associated with the original cult, carved on the sides of the colossi. The systematizers chose one, the 'thunderbolt', and ignored the rest. The overall result of their work was a collection of attributes pinned, as it were, on to the stock all-purpose model of a god. In this condition he became amenable to a language/image-game. The combination Min-Amun appeared, in which a degree of merging took place with the god Amun from the nearby town of Thebes. At Abydos, in the Middle Kingdom, a cult of 'Min-Horus the Victorious', which brought the cult of Min into association with the cult of Osiris, achieved some popularity.

The second example is the sacred *benben*-stone. It seems to have stood in a shrine at Heliopolis and was presumably an example of the widespread ancient cult of individual stones thought to have peculiar properties. The original is now lost, but pictorial evidence suggests that it was an upright stone with rounded top (Figure 3.14 (1), (2)). The stone became the prototype for a range of architectural symbols, and as such reappears spasmodically through Egyptian history in its primitive shape. King Akhenaten, for example, set up a round-topped *benben*-stone in one of his sun temples at Amarna (Figure 3.14 (5)). An earlier elongated version was erected in the Fayum, at the site of

Abgig, by King Senusret III of the Twelfth Dynasty (Figure 3.14 (6)), and other examples were noted in the section on Hierakonpolis. But the rounded shape more frequently jarred on the aesthetics of the Egyptians. It lacked geometric purity. They preferred to convert the rounded top into a geometric shape of straight lines, a pyramid, and the complete stone into a truncated obelisk. Monumental versions in this form were built as the focal point of solar temples associated with the pyramids of Fifth Dynasty kings near the site of Abusir (Figure 3.14 (7)), and the pointed tops of pyramids and obelisks were called by a feminine form of the name: *benbent*. They could even be added (incongruously from our point of view) to the tops of replicas of tent shrines (Figure 3.15, p. 143, and see below).

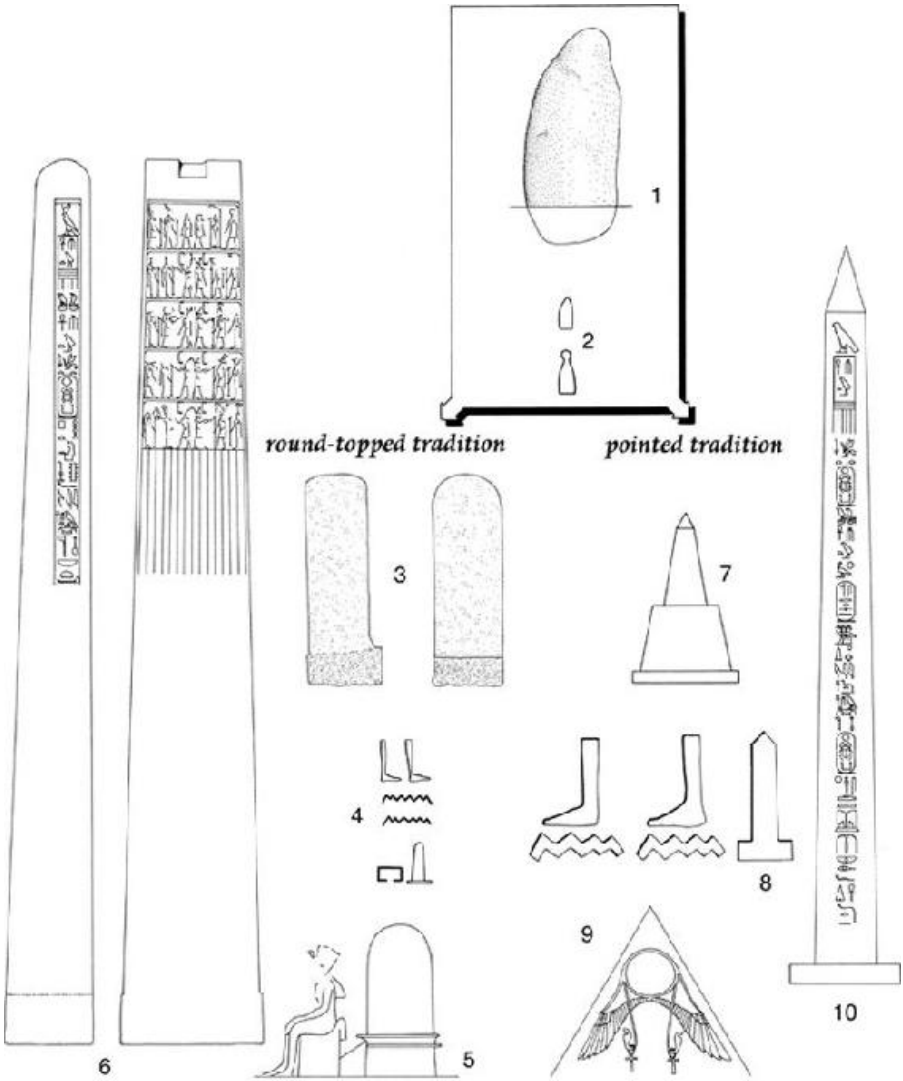


*Figure 3.14*Artistic transformation of a symbol: the sacred *benben*-stone of Heliopolis. (1) Hypothetical original sacred stone. (2) Early depictions as hieroglyphs in the Pyramid Texts (Pyr 1652b, 2069a). Artists preferred to give it a symmetrical, geometric shape, creating two traditions, one of flattened rectangular section with a rounded top (3–6), and another of square section and with a pointed top (7–10). (3) Round-topped stela from Hierakonpolis temple, height 6 m, after Quibell and Green, *Hierakonpolis* II, Pl. LXVII. (4) Writing of *benben*-stone in the tomb of Meryra at Amarna, Eighteenth Dynasty, after L*D* III, 97e. (5) Depiction of a *benben*-stone erected in a sun temple at Amarna, tomb of Meryra, after Davies, *Rock Tombs* I, Pl. XXXIII. (6) Granite standing stone at Abgig, Fayum, erected by Senusret I, Twelfth Dynasty, height 12.62 m, after L*D* II, 119. (7) Profile, partially restored from ancient depictions, of the central feature of the Fifth Dynasty sun temples at Abu Ghurab. (8) Writing of *benben*-stone on an inscription from Amarna, after Pendlebury, *COA* III, Pl. CIII.48. (9) Top of a pyramidion from the top of the pyramid of King Khendjer of the Thirteenth Dynasty at Saqqara. On it is carved the winged disk of

the sun. After G. Jéquier, *Deux pyramides du moyen empire*, Cairo, IFAO, 1933, Fig. 17. (10) Granite obelisk of Senusret I at Heliopolis itself, height 20.4 m, after L*D* II, 118h.

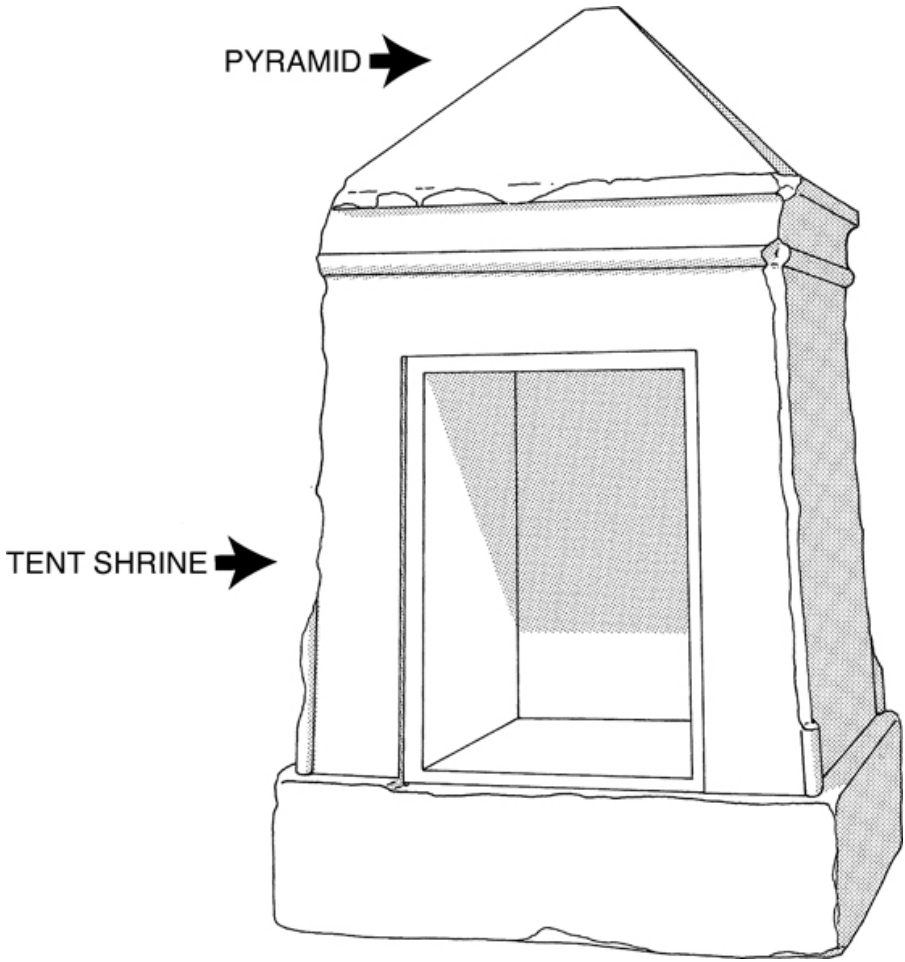


*Figure 3.15*Combining unrelated symbols. A naos (or inner shrine for a divine image) in the form of a tent shrine with a pyramid placed on top, something structurally incongruous, but aesthetically satisfactory as a combination of symbols. Thirtieth Dynasty, after G. Roeder, *Catalogue général des antiquités égyptiennes du Musée du Caire: Naos*, Leipzig, Breitkopf und Härtel, 1914, Taf. 16b.

But what is the reason for the solar connection? The word *benben* had a similar consonantal sequence to the verb *weben*, 'to shine', 'to rise' (of the sun). Verbal similarity supplied a logical linkage. From the practice of language-game the *benben*-stone became a symbol of sunrise and the renewal of life. For the same reason, the heron ('phoenix'), which in ancient Egyptian was called *benu*, was brought into association with the cult of this stone, so that the temple at Heliopolis could be called 'The Mansion of the Phoenix'. The

statement which linked them all together and implied that a cogent meaning was present ran as follows: 'O Atum-Kheprer (god of creation), you became elevated on the height, you rose up (*weben*) as the *benben*-stone in the Mansion of the Phoenix (*benu*) in Heliopolis.'[35] By this kind of thinking, more akin to poetry and arousing no further curiosity in the Egyptian mind, order was imposed on a small part of the Egyptians' inheritance from prehistory. The practice of language-game replaced the meaning that that particular stone had once held and is probably permanently lost to us. The ideal type was recast in both shape and meaning. In this instance, as with the history of the god Min, we are witnessing the invention of tradition, something that the Egyptians enthusiastically pursued until the end of their civilization.

We can recall a further example. By the early Middle Kingdom Abydos had become the centre for the cult of Osiris. For reasons that we shall probably never know, court thinkers, in the process of systematizing and rationalizing the diverse local traditions in Egypt, had already made a connection between Osiris and Abydos during the late Old Kingdom. We know this from statements in the Pyramid Texts. Yet on the ground, in the temple which actually stood in the town of Abydos, the first known reference to Osiris dates only to the Eleventh Dynasty. In the Old Kingdom the temple belonged to a local jackal god associated with the great cemetery nearby, called Khenti-amentiu, 'Foremost amongst the Westerners', the second element a reference to the blessed dead. From the Middle Kingdom onwards, this name becomes principally an epithet for Osiris, as 'Osiris, Foremost amongst the Westerners'. For the earliest period of the Abydos shrine's existence a similar complex relationship seems to have existed between Khenti-amentiu (assuming that his cult was of this antiquity) and popular practice as revealed by the votive objects. They contain no image of this god, although a model shrine depicts a human-headed deity to which we are unable to give a name (Figure 3.17 (4), no. P243, p. 147).

From the range of evidence available it is all too apparent that intellectual intervention shaped Egyptian culture, including knowledge of the gods, over a long period, stirring the cauldron of tradition and adding new ingredients. The problem for modern scholarship in too ready an acceptance of the results is that it undermines the principal method of research: that of carefully following the sources backwards in time from the better understood later ones to the more fragmentary and elusive earlier ones, and

assuming that the meaning always remained the same. We tend to work by trying to identify fossils of early knowledge embedded within later sources. Yet if we take this easy course we run the risk of substituting for ancient language-game a modern scholarly game.

Folk culture?

The urge for purity of form and consistency of style came to have a generally debilitating effect on spontaneity. The modern world recognizes that cultural expression appears at more than one level. Whilst great or high culture originates from centres of established patronage and inevitably makes the greatest general impact, popular culture, which is 'folk culture' when of the past or of agrarian origins, although less intellectual, has a vigour and originality of its own and is a legitimate aspect of the whole culture of a people. It can find its energy through expressing deliberate rebellion against 'high culture'. We should be prepared in studying ancient societies to encounter the same plurality of expression.

The problems that arise for the distant past are, however, peculiarly large. Popular culture uses music, oral tale and dance as much as figurative arts. These are lost to archaeology except when caught in rare ancient pictures that cannot, in any case, convey more than the briefest programme note. This is true for ancient Egypt. Tomb pictures and occasionally temple scenes show dances and acrobatics, and singers and musicians performing. But we cannot reconstruct living shows from them. The life that surrounded local shrines kept local tradition alive. But outside these cultural enclaves the success of court art and the tendency towards mass stereotyped production of artefacts sapped local creativity.

We can apply a simple test. Pottery has survived abundantly from all periods of ancient Egypt and had common use in the households of rich and poor alike.[36] It has also become in other cultures a vehicle for artistic expression. Predynastic Egyptian pottery contains the beginnings of just such a tradition. A class of Nagada II pottery, actually called 'Decorated Ware' by early archaeologists, combines a distinctive shape with a range of simple painted designs that belong to the same tradition that created the scenes in the Hierakonpolis Painted Tomb. It is easy to imagine that this type of decorated pottery could have become the archaic phase of a long history of decorated ceramics in which the characteristics of the medium produced distinctive derivatives from the Pharaonic art style with a life of their

own, matched in modern times by detailed analysis by art historians. It did not happen. The development, in the late Nagada II period, of the low relief carvings which represent the beginnings of court art and the codification of ideas seems to have undermined any further interest in ceramic art. The decoration on pottery declines into simple squiggles and then vanishes altogether. Henceforth pottery decoration was a rarity, except for a brief interlude in the mid-New Kingdom. Pottery became a utilitarian product. It is sometimes well made, notably in the case of fine orange-burnished bowls produced in the Old Kingdom, but nevertheless still falls short of an artistic tradition offering individual expression. There was an element of regionalism in pottery styles. But none of this amounts to a tradition of ceramic folk art. The Early Dynastic and Old Kingdom pottery types of the provincial towns that possessed the local shrine cultures outlined above are regional variants of utilitarian objects ranging from the coarse to the bland.

If we look carefully, however, we can find exceptions. One concerns the art of carving seals. The cylinder seal was a foreign idea early brought to Egypt. The first ones occur in the late Nagada II and are either imports from or copies of imports from the contemporary cultures of western Asia (the Near East). From the First Dynasty the Egyptians began to carve hieroglyphs on them and to use them as implements of administration, sealing letters, jars, doors, boxes and so on with distinctive official designs (Figure 3.16). Carved cylinders continued to be, however, objects of interest in their own right, with a value that was not straightforwardly administrative. Numerous private seals are known from the Early Dynastic Period bearing designs which use both hieroglyphs and other design elements in a somewhat surreal manner, displaying an interest in developing designs away from the natural models which normally so entranced the Egyptians. By the latter part of the Old Kingdom they had become a minor art form, occurring occasionally in court cemeteries and sometimes accompanying hieroglyphic inscriptions. They then passed through a sudden transformation, abandoning the cylinder shape for a flat disc with a shank or a prism shape, becoming stamp seals ('button seals', Figure 3.16 (7)–(9)) bearing designs in the same non-formal tradition on their bases. The centre of this industry seems to have been Middle Egypt. Further steps in design development can be observed through the First Intermediate Period, and by the end the characteristic Egyptian scarab-shaped seal had evolved. Moreover, it had also been taken up by the administrative class as a more convenient way of

applying seals, and so the scarab replaced the cylinder seals altogether. With official recognition came the application of proper formal designs, and the snuffing out of this minor provincial art tradition.

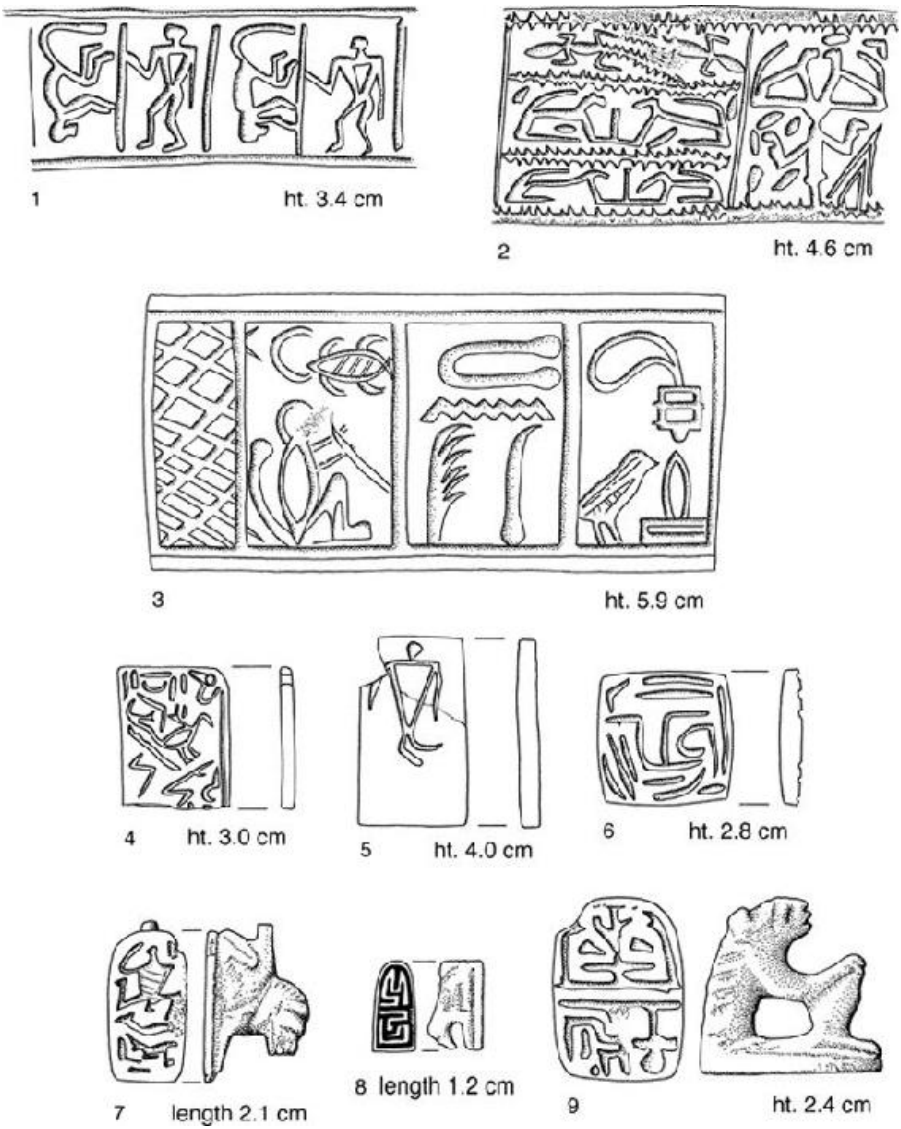


*Figure 3.16*The makings of an alternative art style, which failed to develop, revealed by small carvings on Old Kingdom objects. (1)–(3) Seals, from Abusir, Staatliche Museen, Berlin, 15600; Egyptian Museum, Cairo, JdE 72610; Staatliche Museen, Berlin, 16433. After H.G. Fischer, *MM Journal* 6 (1972), 5–16, Figs 4, 18, 21. (4)–(6) Faience votive plaques from the temple at Elephantine, after Dreyer, *Elephantine* VIII, 151, Abb. 60, Taf. 57. (7)–(9) Button seals from Middle Egypt, after Brunton, *Qau* I, Pl. XXXIII.118, 121, 112.

This particular case illustrates how court culture could, on occasion, continue to take on board new designs of provincial origin. It was part of the success of the Egyptian state that it managed to build local traditions into a national framework of myth and design. The process took time and, as discussed in the first part of this chapter, in provincial shrines local tradition continued to thrive until well into the Old Kingdom. In later periods when new elements appear, such as the popularity of the domestic god Bes from the New Kingdom onwards (Figure 8.20, p. 373), or the huge interest of the Late Period in sacred animal burial, we are entitled to suspect a derivation in popular consciousness and behaviour: folk culture surfacing only when taken up by official patronage and made explicit and visible in sources that we can understand.

Ideal types in architecture

Architectural ideal types were less amenable to mechanical reproduction, and had a more complex evolution. They had a very real existence in the minds of the Egyptians, but gave rise to broader scope in their realization as structures and buildings. Even more than with art, Pharaonic architecture reveals how tradition was invented.

By the Early Dynastic Period the normal material in use for building was mud brick. People used it for houses, for town walls, for the linings of tomb pits, and for the memorials and offering-places built above them. The potential of brick for creating interesting patterns in the method of laying was realized for palaces, and for court tombs, in the palace-façade style of architecture (Figure 2.20, p. 99). Its most important monumental survivor, copied in stone, is the great plaza and token palace in front of the Step Pyramid at Saqqara (Figure 2.21, p. 101). It seems not, however, to have been used for temples. It appears suddenly, its details fully developed, at the beginning of the First Dynasty. This has led to a theory that it derives from the temple architecture of Mesopotamia where the style was deeply rooted with a long history of evolution behind it. This is not so far-fetched as it might seem at first, for there is other evidence for contacts with southern Mesopotamia during the later Nagada II period, although their nature and significance are now hard to judge.[37]

Alongside the palace-façade style of brick architecture, however,

we have to recognize the existence of a second architectural tradition that was to have, in the end, the determining influence on Egyptian stone architecture to the end of Pharaonic Egypt. This was the architecture of structures built of wooden frames covered partially or wholly with plain wooden panels or with sheets of woven matting or bound reeds (Figure 3.17). To appreciate the technology we can turn to early artistic representations that are inevitably ambiguous in communicating to us their details, but better still, actual examples have survived from the Old Kingdom. The two most famous are the cabins on the funerary boat of Khufu (Cheops) at Giza, and the cube-shaped tent of Queen Hetep-heres, Khufu's mother, from her tomb also at Giza.[38] The various sources agree as to structural form: slender wooden supports often with papyrus-bud finials, wooden roofing-ties to join them together, being equally slender and either flat or evenly (though only gently) curving upwards, or curving asymmetrically. At the front, these formal tents could be completely open, or only partially so through the use of a screen covering the lower part. The ancient word for such a structure was *seh*, and one of the hieroglyphic signs used to write it was a simplified picture of the structure itself.

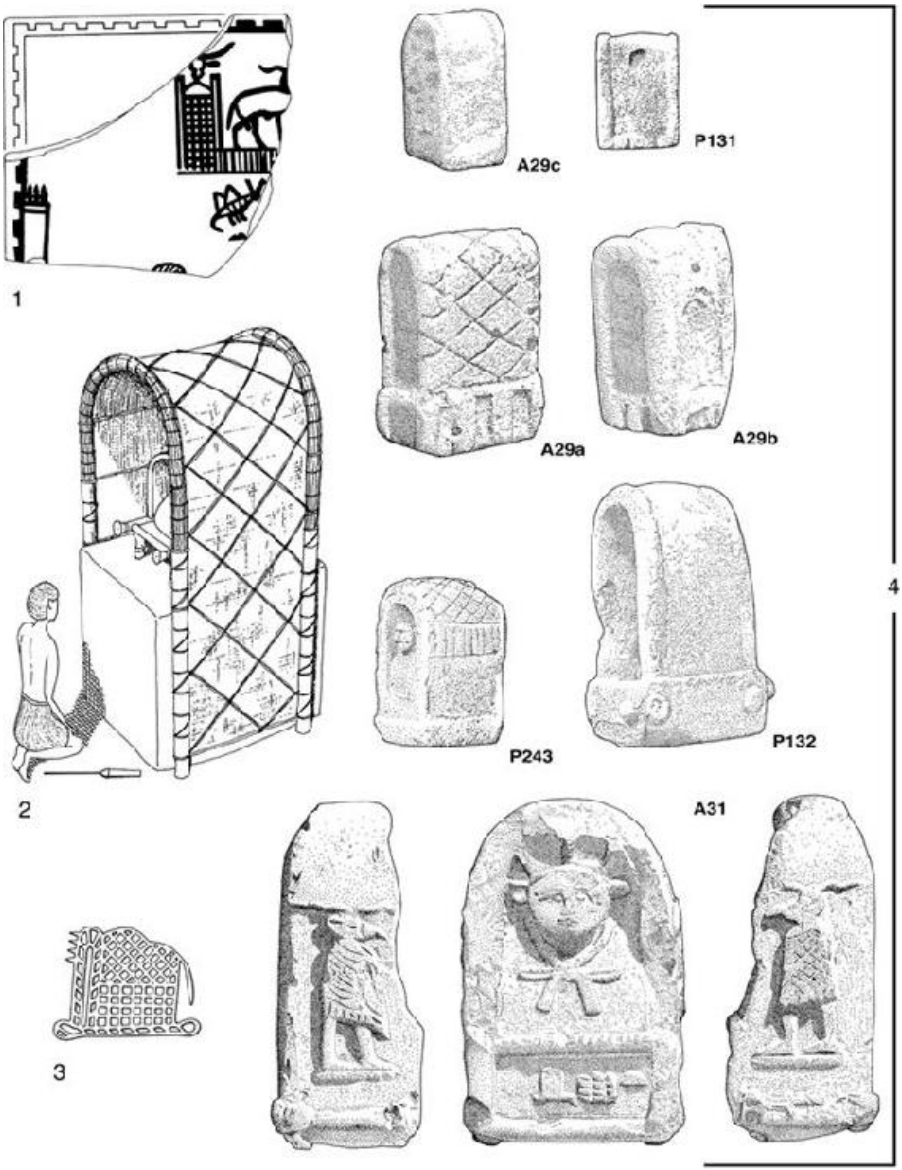


*Figure 3.17*The early tent shrine: prototype for Pharaonic formal architecture. (1) An early tent shrine for the cult of a ram statue, set within a panelled brick enclosure. Ivory tablet from the tomb of King Den at Abydos, First Dynasty. After Petrie, *Royal Tombs* II, 25, Pl. VII.8. (2) Reconstruction of a tent shrine for the revealed image of god, based on the brick dais in the Old Kingdom temple at Elephantine; see Figure 3.4, p. 119, and Photograph 3.1, p. 120. (3) Ancient depiction of a tent shrine with the profile of an animal, perhaps on a carrying-frame and thus portable. Part of the design on a mud-seal impression from the tomb of King Hor-aha, early First Dynasty. After W.B. Emery, *Ḥor-aḥa*, Cairo, Government Press, 1939, 27, Fig. 23. (4) Models of early tent shrines. P131, P132 and P243 are in faience and from early deposits at Abydos. After Petrie, *Abydos* II, Pl. VII.131, 132; Pl. XI.243. A29a–c are in faience and A31 in limestone, all from an uncertain location. After H.W. Müller, *Ägyptische Kunstwerke, Kleinfunde und Glas in der Sammlung E. und M. Kofler-Truniger, Luzern*,

Berlin, Hessling, 1964. They vary in size between 4 and 10 cm.

The Hetep-heres tent was made for temporary use and to be portable. The whole structure could be taken apart, packed up in a box and transported. This fact probably explains the widespread use of this type of structure. It was suitable for royal occasions outside the brick palace; for funerals, where the burial equipment could be laid out for display and possibly even for the preparation of the body prior to burial; and for the comfort of the official class when visiting the countryside (Figure 3.18 (3)). Their use in private funerals has a striking analogy in modern Egypt, where large portable tents consisting of decorated cotton coverings laid over a rectangular framework of poles can be hired to accommodate mourners paying their last respects and listening to a Quranic recitation. Some representations of what seem to be portable tents mounted on carrying-frames are also known from the Early Dynastic Period, as in the scene on the Narmer mace head (Figure 2.22 (G), location b2, p. 103).

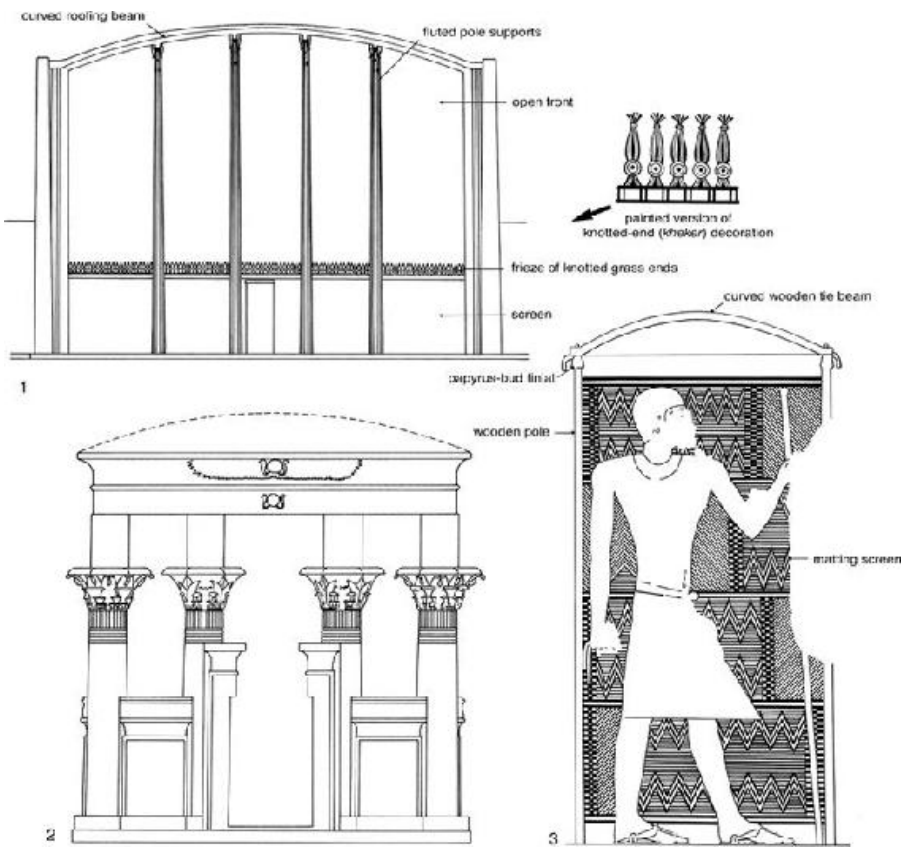


*Figure 3.18*Ideal types in architecture: the open-fronted tent shrine (see also Photograph 2.2, p. 105). (1) Rendered into stone at the Step Pyramid of Djoser at Saqqara. After Borchardt, *Tempel*, Bl. 10. (2) Likewise, but in a more developed form, at the Roman kiosk at Philae, the broken roof line representing a now perished curved wooden roof. After Borchardt, *Tempel*, Bl. 5. (3) The same architecture retained for convenience as a portable framed tent for visits to the countryside, from the tomb of Werirni, Fifth Dynasty, at Sheikh Said. After N. de G. Davies, *Rock Tombs of Sheikh Said*, London, EEF, 1901, Pl. XV.

By the First Dynasty brick architecture was well established in Egypt, and from the material reviewed in the first part of this chapter it seems fairly clear that built shrines of various kinds made early appearances in provincial towns. It seems unlikely, therefore, that the image of the tent shrine reflected the common appearance of provincial shrines. Yet some early representations of what appear to be shrines are of tent form (Figure 3.17 (1)). One class seems to have been made to look like a horned animal (Figure 3.17 (3)). How are we to explain this contradictory evidence?

Part of the answer is provided by some of the objects from early shrines (Figure 3.17 (4)). They actually depict little tent shrines with curving tops, in three cases (P243, A29a on the outside, A31 on the inside) showing the criss-cross pattern on the cover. The same appears also in the early depictions, and is probably a pattern, or a method of binding, in the matting used as covering material. Three examples (P132, P243, A31) seem to rest on frames with legs (A31) or projections representing carrying-handles that made them portable. Two of them (A29a and b), however, rest on pedestals with sides decorated with panelling, making it likely that the pedestals are of solid, mud-brick construction. Two of them (P243, A31) contain a human-like figure, in the latter case with a face very similar to those which top the Narmer Palette, provided with cow's ears and wearing what looks like a knotted sash around the neck. It is labelled with the hieroglyphic word *Repit*. Whether this is a proper name for a goddess or a term for a type of image or essence of a divinity is hard to tell. The face is also that of the goddess Bat, who had some prominence in early times, although eventually a goddess named Repit did appear.[39] Occasional hieroglyphic writings of this word use a sign depicting the same small portable shrine, and in so doing imply that portability was of its essence.

Institutions that are basically irrational thrive on an interaction between a hidden and a revealed element. The carefully staged drama of formal appearances of the king illustrates this. In New Kingdom and later times, when the nature and rhythm of temple life is much better

known, we can see it reflected in temple architecture and ceremonial. The hidden aspect of divinity required a sanctuary, removed as much as possible from contact with normal human life, in which resided the most sacred of images. Revelation was achieved by careful theatrical management which brought a tangible symbol of the divine presence into the public, or semi-public domain, yet still behind barriers, both physical and psychological. By the New Kingdom the means of public manifestation was by portable boats borne on carrying-poles and supporting, in place of a cabin, a small and partly enclosed shrine (Figure 6.1, p. 250). The word used for this shrine on a boat was *kariy*. It is reassuring to find that the earliest known writing of the word, in the Pyramid Texts of the late Old Kingdom, uses as its hieroglyphic determinative a picture of a portable tent shrine of the Early Dynastic type; reassuring because the two are functionally the same.[40] Wherever the later portable images were rested, a special platform or a complete building was constructed. In the New Kingdom they, too, could be called a 'tent shrine of the god' (using the word *seh*), although built of stone (e.g. the processional way-stations of Figure 6.2, p. 251). Within them the actual resting-place was marked by a more-or-less cubic pedestal of stone with ornamental top on which the portable boat shrine was placed.

We can therefore look to earlier periods for functional equivalents, and if we do this, some of the key pieces of evidence fall into place. Portable venerated images were already widespread, but carried not in boat shrines but in carrying-chairs of the kind used by the nobility, sheltered by a canopy of matting on a curved wooden frame. Wherever they were set down, a pedestal was needed, often built of brick, with either plain or panelled sides. This could have its own canopy similarly constructed. The one complete early shrine that we possess, at Elephantine, can be interpreted along these lines (Figure 3.4, p. 119). Here, in a simple and modest way, is visible the duality of domain that arises when sacred images play a major part. At the rear, between the granite boulders, we find the enclosed sanctuary for the hidden images (or purely imagined presence); in the courtyard in front is the pedestal for the portable, revealed image, complete with poles for the canopy support.

The portability of the revealed images (called generically *Repit*) took them not only on localized journeys, but also from time to time to the royal court for the *Sed*-festival, where they were likewise housed inside tent shrines erected on larger brick pedestals. At the Step Pyramid, along the east side, such a congregation of temporary

shrines was rendered in stone (Figure 2.21 and Photograph 2.2, pp. 101 and 105). Although the design of these tent shrines was basically a common one, they were sometimes given a distinctive appearance by varying the shape slightly, or by adding details, including pairs of vertical poles.

Was there ever a time when important buildings were actually made from timber posts and panels made from plant materials, erected in a setting in which mud brick and stone played only a minor part? We have already encountered the answer at Hierakonpolis. Chapter 2 introduced two localities at this place, HK6 and HK29A, which seem, in different ways, to mark events in the lives of the ruling group. Both of them relied largely on timber posts to give shape to various structures. At locality HK6 (the elite cemetery, Figure 2.17, p. 93) they were halls with roofs supported on many columns, as if prototypes of later hypostyle halls of columns in temples. Locality HK29A (Figure 3.19) was a part of the predynastic desert town site (which was itself surrounded, at least in part, with a wall or palisade made from upright timbers). It remained in use through the Nagada II period to the First Dynasty, a span of up to five centuries. Its main purpose, to judge from the huge quantities of animal bones found in adjacent pits, was to act as an enclosure for the ceremonial slaughter of animals, domesticated and wild. At its centre was an elongated space (measuring 45 × 13 m) with a curving end which sloped upwards towards the east and was surfaced with packed mud. It was surrounded by eroded traces of walls, fences and palisades, the product of many alterations. Some of the post holes were large (in one case, belonging to Structure III, still containing the base of a wooden post, perhaps 30 cm in diameter), and forming a monumental gateway. At the south-east end of the oval stood an upright object, either a stone slab or a large post. The north-west end had been overbuilt by a thick wall enclosing a polygonal space.

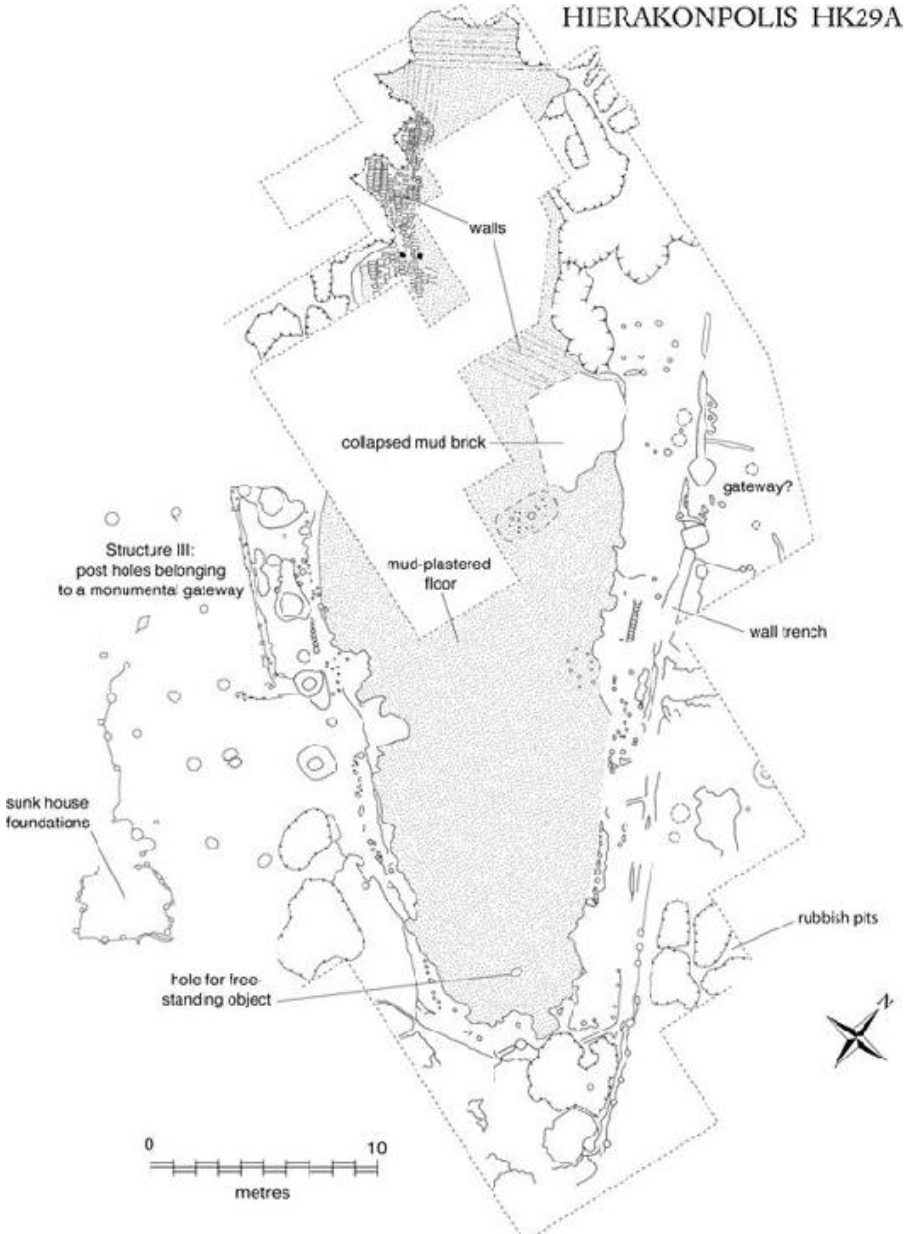


*Figure 3.19*Plan of locality HK29A at Hierakonpolis, an early ceremonial centre. The irregular mud-plastered space was surrounded by a palisade with a monumental wooden gateway (Structure III) in one side. The thousands of animal bones from rubbish pits located just outside derive from domesticated species and wild animals. Their slaughter implies not only feasting but a demonstration of how the element of chaos in the world that wild animals symbolized could be overcome by the ruler and his agents. After R. Friedman, *JARCE* 45 (2009), Fig. 1; *Nekhen News* 15 (2003), plan on p. 4.

These are larger and more elaborate examples of a style of building based around wooden posts which has been found at other predynastic sites, especially in the delta where, during the latter part of the Predynastic Period, they gave way to architecture of brick. The earlier style, which gave a different appearance to buildings, nevertheless survived, both as temporary buildings and as the protection for portable images, and in the imagination as the ideal type of building set in an imaginary primaeval world in which the gods dwelt.

The originality of the Step Pyramid lies in the way that its architect created a style of permanent stone architecture from this vestige of a more ancient way of building. The vocabulary of forms now rendered into stone became henceforth the ideal type of building to which later temple architects almost invariably looked. We can recognize three versions at the Step Pyramid. The most common, with more than 20 examples, depicts a rectangular wooden-framed tent with curved roof, standing on a pedestal (Figure 2.21, p. 101, and Photograph 2.2, pp. 101 and 105). Some are small and with plain fronts; the fronts of the larger ones, however, display carved poles supporting the roof, implying that they are really depicting tents that are open at the front. From this we can guess that the smaller ones were thought to have open fronts as well. In two cases at least, a flight of narrow steps ran up to the top of the pedestal or platform on which the tent stands. In examining the Step Pyramid architecture we must not forget that we are seeing the fruits of modern reconstruction. When excavated, the all-important façades of the buildings inside the complex were found reduced to the lowest courses of stonework. That said, the study and partial reconstruction of these buildings is based on a close examination of loose blocks found in the rubble as well as on ancient depictions of traditional shrines. Although the result makes this particular group of shrines look very similar, from the evidence of ancient pictures we must hold in our minds the possibility that some or all of them bore some distinguishing mark to make them look individual (e.g. a wooden figure on a projecting wooden pole or base), since they probably represent the temporary festival shrines to house divine images assembled from provincial towns.

The second type is a larger variant, and directly on the ground instead of on a pedestal. There are two examples, the so-called North and South Houses. Again they depict an open-fronted building displaying the outer row of slender carved roof supports. But privacy of the interior is provided by a screen running between the roof

supports and broken only by a doorway (Figure 3.18 (1), p. 148). The screen was imagined as made from reeds, a message conveyed by carving in stylized form the knots tied in the loose top ends. This general design was a potent one, particularly in the use of the screen wall linking columns, and in the row of stylized knots which, as the *kheker*-frieze, passed into general use as a decorative motif.

The third version of the temporary wooden structure at the Step Pyramid had perhaps four examples. One of them, 'Temple T', is of particular significance since it is one of the very few 'real' buildings of the Step Pyramid, having a complete interior of rooms and corridors. The exterior of Temple T is a severe version of the wood and matting style (Figure 3.20 (1)). All four exterior walls look the same: plain rectangular surfaces, topped by a narrow horizontal rolled binding and above this the loose tops of reeds reduced to a plain frieze. All four corners of the building were protected by further bound rolls of reeds set vertically. The interior, however, is incompatible with a building of these materials. Its complex internal plan resembles the funerary palaces at Abydos constructed of mud brick. Although pilasters have been added, decorated after the style of bundles of reeds, it is the plan of a building of solid materials, an impression reinforced by the ceilings, which were carved in imitation of closely set logs of wood. This is a type of roof that, from its weight, demands solid walls of brick or stone. Light timber frames and matting screens are structurally unsuited.

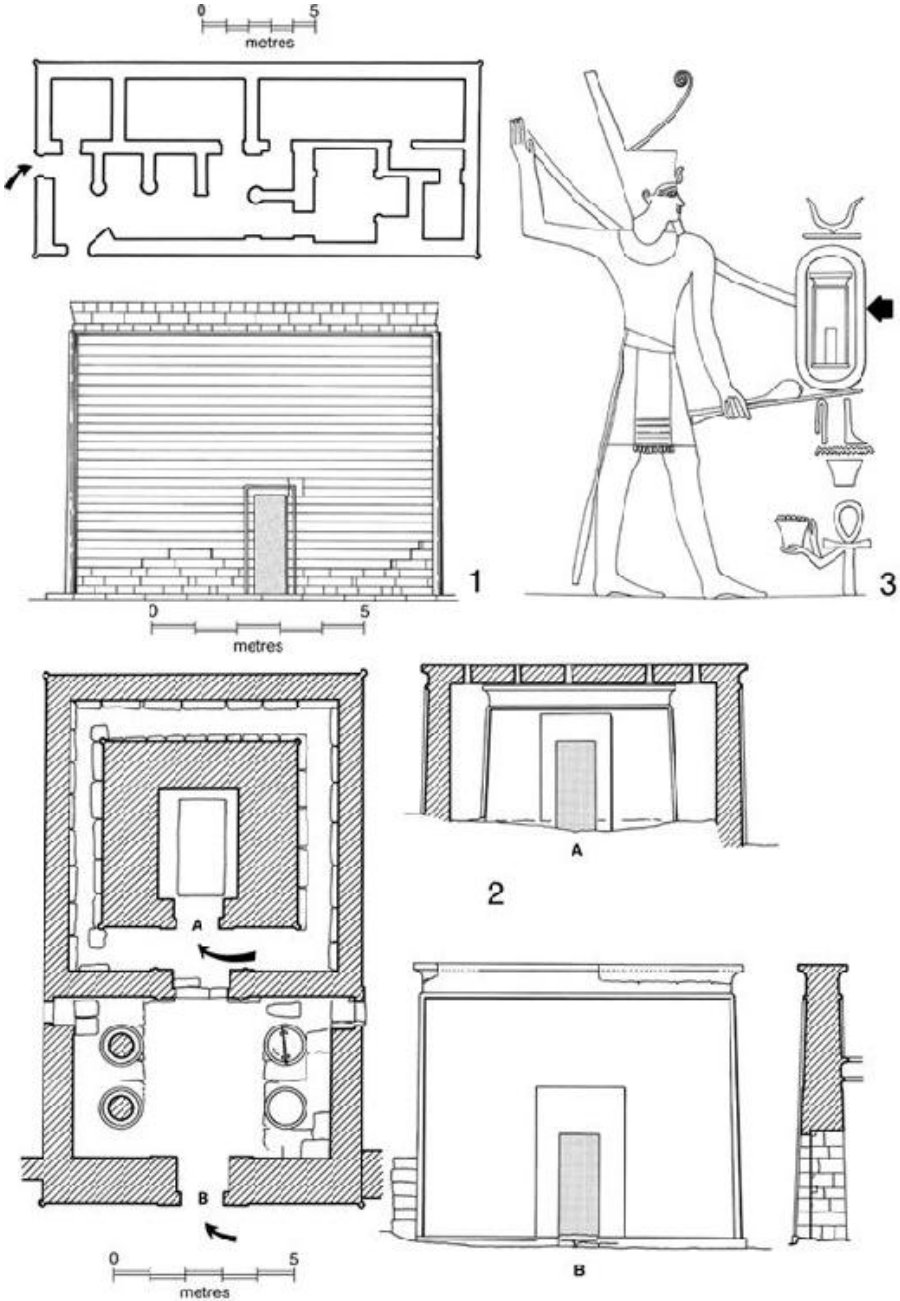


*Figure 3.20*Ideal types in architecture: the enclosed tent shrine. (1): Temple 'T' at the Step Pyramid of Djoser. After Lauer, *La pyramide*, Pl. LV, and Fig. 157. (2) The temple-tomb of the God's Wife Amenirdis I at Medinet Habu (*c*. 715 BC), in which one tent shrine is nested within another, a common Egyptian architectural ploy. After Hölscher, *Medinet Habu* V, Fig. 24. (3) Scene of King Tuthmosis III purifying the temple of Amada in Nubia by sprinkling natron over it, before the god Horakhty. The temple itself is symbolized by a picture of a tent shrine (marked by arrow). After H. Gauthier, *Les temples immergés de la Nubie: le temple d'Amada*, Cairo, IFAO,

1913, Pl. XVII.

Temple T, with its wrap-around application of tent architecture to a building of more solid form, set the style for centuries to come. Externally it shows the essence of the ideal type of later Egyptian temples. This is occasionally made explicit in temple scenes where, in a ceremony of purification of the temple building, the building itself is depicted as if a hieroglyph and in this simple original form (Figure 3.20 (3)). It was, however, primarily the model for temple exteriors. The severe rectangular wood and matting building became a façade, the proper wrapping for a building whose interior reflected the practical needs of the occasion.

Just how the reconciliation between form and function was achieved by later architects becomes, in effect, the remaining history of Egyptian temple architecture (Figure 3.21). Internal plans accommodated needs that changed from time to time and from place to place. In Chapter 6 we shall see how the New Kingdom taste for portable boat shrines, and various aspects of the royal funerary cult, created distinctive plans that were still kept uncompromisingly inside the jacket of the old ideal type. For the moment, this point will be illustrated by examples that show just how enduring the imagery created at the Step Pyramid was. The first is the almost intact temple-tomb of the God's Wife Amenirdis I at Medinet Habu, which dates to the Twenty-fifth Dynasty (*c.* 750 BC; Figure 3.20 (2)). Essentially the building consists of two tent shrines nested inside each other. The shrine that covers the entrance to the tomb of Amenirdis is a simple version, a single chamber which approximates to the original form in both interior and exterior. This is set within a larger building that includes a colonnaded courtyard, a favourite element in the design of temple interiors. For the final external impression, the architect has returned to the tent-shrine prototype, though emphasizing the front of the building by making the wall taller. This was also a favourite device, though on larger buildings the tall façade was normally, from the New Kingdom onwards, divided in the centre to create the characteristic pair of 'pylons', a limited gesture of reinterpretation of original form. It is particularly to the kind of inner shrine found here that the Egyptians gave the name 'tent shrine of the god' (*seh-netjer*), although from the New Kingdom onwards it was also used more loosely as a synonym for 'temple' generally. This was not illogical since the whole building externally was modelled on the same ideal type.

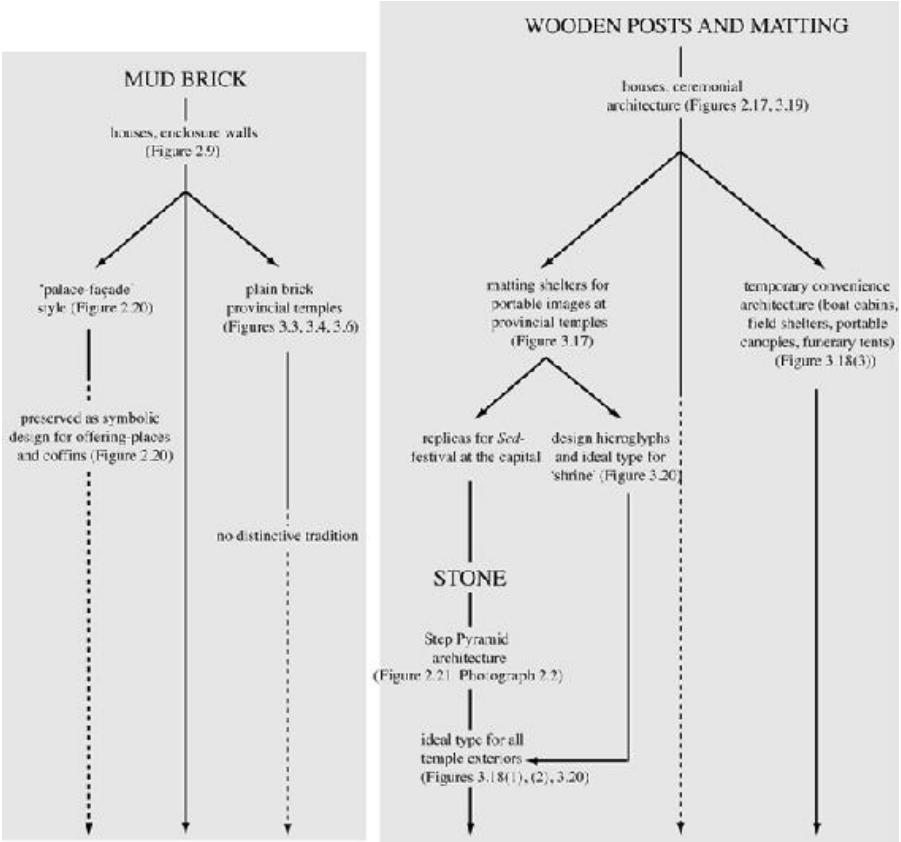


Figure 3.21 The sources of Egyptian architectural styles. Figure 8.10, p. 342, illustrates the appearance of a wood-and-matting phase at the Great Aten Temple at Amarna.

We can gain the most impressive idea of how strong was the hold of the ideal types from Egypt's beginnings by looking at buildings from the very end of ancient Egyptian civilization, when Egypt was ruled first by the Ptolemies, Greek-speaking inheritors of Alexander the Great's Egyptian province, and then by the Roman emperors following the death of the last of the Ptolemaic line, Queen Cleopatra VII. In the rural hinterland of the Nile valley these alien rulers encouraged the building of traditional temples in which they themselves appeared in the guise of the divine Egyptian kings of old, featuring in similar scenes of divine birth as had occurred in New Kingdom temples.

The finest example of Ptolemaic temple architecture is the temple of the falcon god Horus at Edfu (237–57 BC). Outwardly the body of Edfu temple faithfully recalls the plain box-like form of the archetypal tent shrine, the front magnified into two pylons. Inside, the

architectural vocabulary continually pays deference to this ideal, from the ornate screen wall and canopy in front of the main columned hall, to the shrine in the sanctuary carved from a single block of black granodiorite which renders this form in miniature, although a pyramidal *benben*-stone has been carved on the top (very similar to the one in Figure 3.15, p. 143). The arrangement of the elements of the plan, however, is characteristic of the time and could not be mistaken for a temple of a much earlier period. Equally distinctive of the period is the *mammisi* (a Greek word), or birth house, outside the front of the temple. Its purpose was to celebrate the divine birth of the king, and for its form the architects returned to the idea of the semi-open tent shrine with screen walls. Some of these buildings even had curved wooden roofs in closer deference to the ideal type, something apparent from the surviving holes for timber beams (Figure 3.18 (2), p. 148).

For the Egyptian priests this was a time of threat to traditional culture. The scenes and texts that cover the walls of Edfu as of other Ptolemaic temples reveal an enhanced awareness of their own rich inheritance of mythology and cult practices. They are far more informative in these areas than are earlier temples. The texts on the walls are not, however, the complete originals. Rather they are extracts from or summaries of several longer 'books', often referred to by their names, which must have been held in the temple library. One set concerns the building itself.[41] These building texts are rich in language-game and symbolic geography, and incapable of resolution into a single scheme of logical narrative. They do reflect, however, a common viewpoint. This was that the new stone temple that was being built, although designed in the style of the times, embodied a range of ideal types whose existence could be counted on through the descriptions and allusions of the texts themselves. The texts, which actually contain the dimensions of the ideal buildings expressed in cubits, represented knowledge which had the power, on its own, of holding the essence of these mythical constructions in place. Their history was set in a mythical time, 'The early primaeval age of gods', and within a mythical geography wherein the temple site itself was the 'Seat of the First Occasion', a reference to a creation myth. The term 'reign of Tanen', an earth god, is also used, recalling the historical scheme of the Turin king list which began with a series of reigns by gods. The setting is devoid altogether of human life. In places it recalls instead the time of the creation of the world, which began with the appearance of a mound from the all-covering waters.

The mound, or mounds, became the site or sites of the original shrines. One of these contained the perch of the falcon god to whom the temple was dedicated, Horus the Behdetite, which originated as a slip of reed planted in the primaeval water. For the mythical shrines, brief descriptions with dimensions are given (Figure 3.22). One of the terms used for the sanctuary (*seh*) is the common Egyptian word for the tent shrine, and helps to reinforce the view that these primaeval buildings were seen as the timber and reed constructions of which the Ptolemaic Edfu temple was a reincarnation in stone.

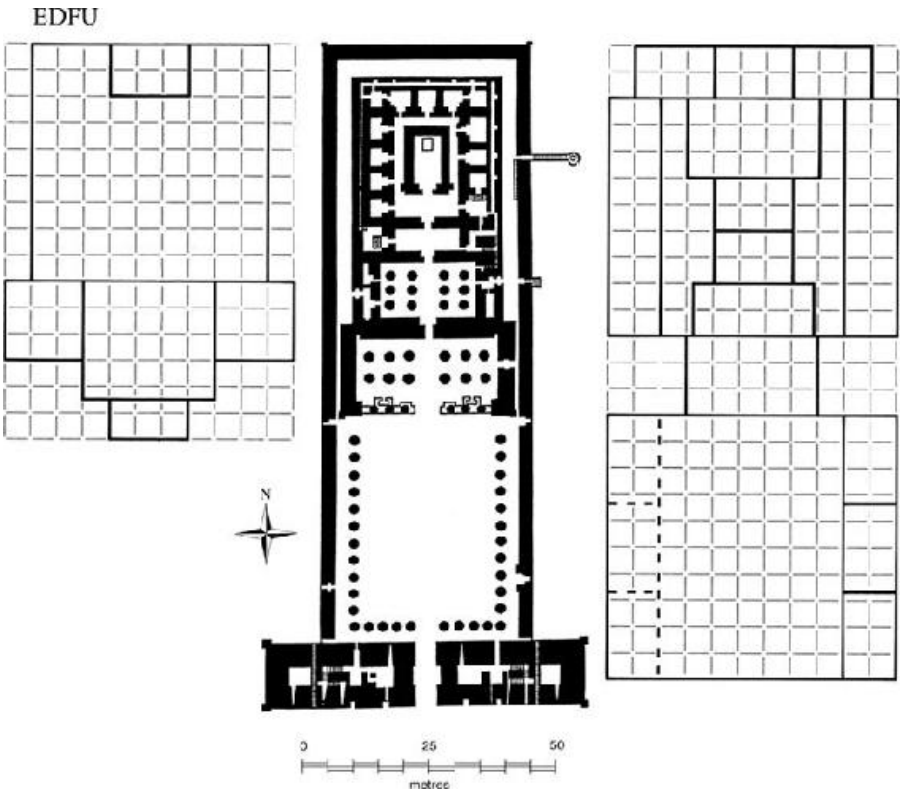


*Figure 3.22*Temples of the mind. *Centre*. Plan of the temple of Horus of Edfu, Ptolemaic Period, 237–57 bc. *Left and right*. Outlines representing mythical temples invented through speculative processes by temple staff, and expressed as written descriptions complete with dimensions in cubits. *Left*. The primitive temple of the sacred falcon (Horus). The opening text reads: 'Laying out the foundation made in the temple of "Uplifter of God" in the reign of (the god) Tanen, in the presence of Ra, according to what is in the book called "Specification of the Sacred Mounds of the Early Primaeval Age".' *Right*. The temple of the sun god. Although these temples (and others) are set in a mythical primaeval age of gods before mankind existed, in their overall scale and proportions they reflect the architectural perspective of the Ptolemaic Period. They are unlikely to be records of early real buildings. After Reymond, *Mythical Origin*. Other Edfu texts which describe the foundation of the real temple provide a description, with cubit dimensions, which is fairly realistic; see S.

Cauville and D. Devauchelle, *BIFAO* 84 (1984), 23–34.

It is, of course, tempting to take these accounts literally, particularly since dimensions are given, and to regard them as containing something of the real history of Edfu temple.[42] It is, indeed, true that Edfu stood on a mound of natural sand and rock within the alluvial floodplain, and so became at inundation time an island. However, the archaeological record shows that until the Old Kingdom it was not a place of significant settlement. The archaeological record of early temples shows great variety in construction, but also the use of brick and of informal plans in the earliest ones that can be identified. The earliest shrine at Edfu, therefore, is likely to have been of brick and very small. The precedence of the tent shrine in the Ptolemaic texts as the exclusively correct and original temple design arose because it fitted exactly the myth-world of the primaeval age of the gods. As to where the measurements in cubits of the primaeval temples came from, we cannot tell. They could be records of buildings which had been erected on the site at various times since, say, the Middle Kingdom, or they could be inventions of the Ptolemaic priests themselves (perhaps arrived at through a symbolic-numbers game).

Egyptian visual culture strove consciously to create the impression of a direct transfer from nature. But it was far from being a spontaneous celebration of natural or inherited primitive forms. It involved a deliberate process of selection and modification in order to create a set, a vocabulary, of ideal types possessing internal consistency. This latter aspect was sufficiently achieved to produce a degree of interchangeability which gave scope to an endless (and for us bewildering) recombination of elements which lay at the heart of the constant invention of tradition.

Nor were the limits of recombination ever reached. The process is continued, unintentionally, by modern scholars as we try to 'explain' Egyptian culture. For the relationship between modern study and ancient source is not quite what it appears to be at first sight. We like to think that the sources are inert, and ourselves objective observers. But the interplay is much more complex. Ancient thought is not dead: it lies dormant in the sources and within our own minds, and when we study the former the latter begins to move within us. One example will suffice to illustrate this. Excavations at western Thebes early in the twentieth century led to the discovery of a combined tomb and temple of King Nebhepetra Menthuhotep of the Eleventh Dynasty (*c.*

2066–2014 BC) at the site called Deir el-Bahari (Figure 3.23). The centrepiece was a square mass of stone masonry standing on a huge podium and surrounded by a colonnade. The excavator, E. Naville, restored a pyramid on the top of the square base, the reconstruction drawing passed into textbooks and for over half a century remained a very familiar element in Egypt's architectural history.[43] It fitted within the general line of architectural development, and could even be seen as echoing the landscape, for a natural pyramidal peak rises above the cliffs and was regarded as the dwelling-place of a god by the Egyptians themselves. The building was later re-examined by a new expedition. Finding that there was no specific evidence for preferring a pyramid on top of the base, the excavator (D. Arnold) restored it as a flat-topped construction, and linked it, with ample scholarly reference, to the notion of the primaeval mound.[44] Later still came a reconstruction that added an actual tree-covered mound of earth on top.[45] Whichever solution we adopt we can justify it by learned references to specific Egyptian sources. Thus, although only one (or none of them) must be technically correct, all are true to Egyptian cultural roots and were potentially present in ancient times, even if they have had to await three thousand years before being realized.

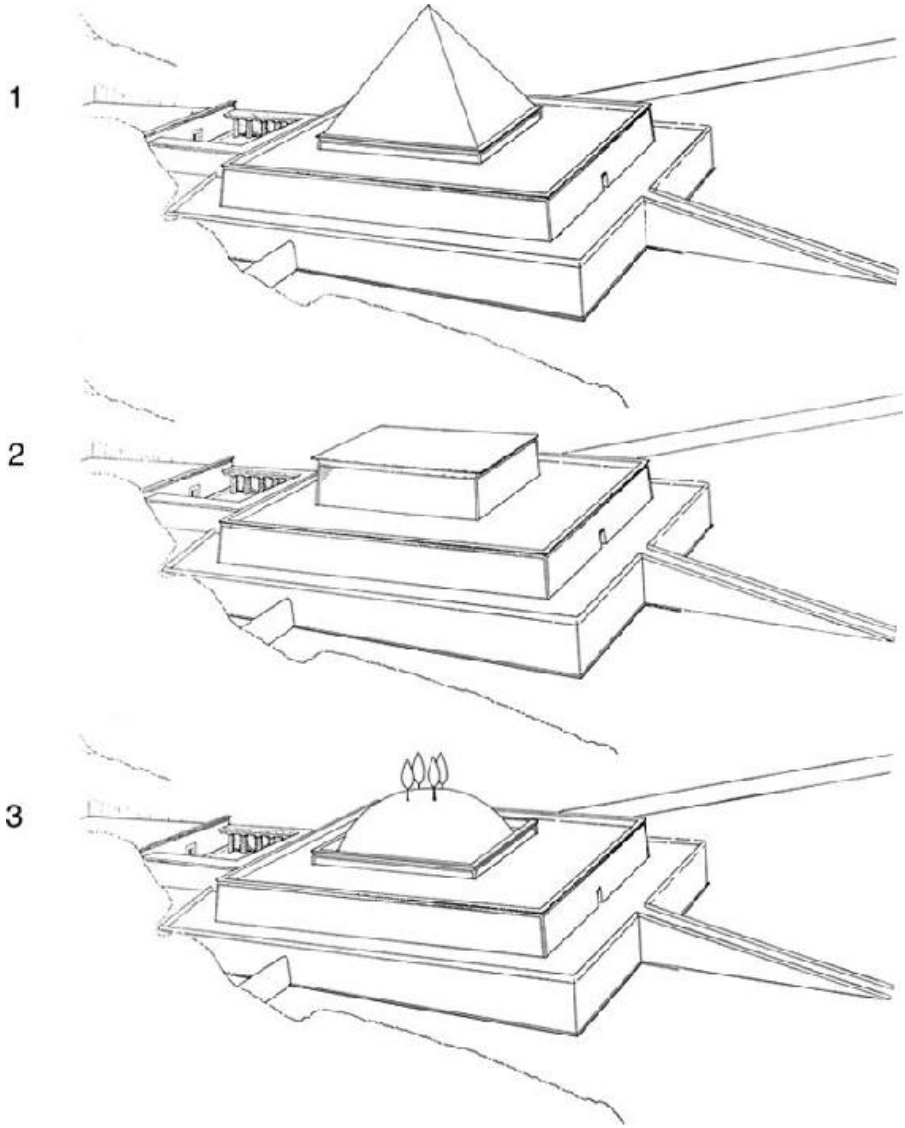


*Figure 3.23*Language-game resumed: scholarly manipulation of Egyptian symbols for modern didactic ends. Three reconstructions of the mortuary temple of King Nebhepetra Menthuhetep at Deir el-Bahari, Thebes, Eleventh Dynasty. Each is 'true' to the spirit of Egyptian thinking and can be supported by scholarly argument, and thus they continue the realization of the potential of ancient Egyptian thought. Whether any of them is 'true' in the sense that it was actually built at Deir el-Bahari we shall probably never know. (1) A true pyramid, after Naville, *XIth Dynasty Temple* II, Pl. XXIV. (2) A flat-topped mound made of stone, proposed by Arnold, *Tempel Mentuhotep*, Frontis. (3) A mound of earth supporting trees, proposed by R. Stadelmann, *Die Ägyptischen Pyramiden*, Mainz, von Zabern, 1985, 229, Abb. 74.

There is a parallel of sorts here in the revival of classical culture in Renaissance Europe, and, limited more to architecture, the later Gothic and Egyptian revivals. Here artists and architects strove to use

the spirit and the visual vocabulary of a dead culture in pursuit of a living art, and thus realized the potential latent for further development within a past culture, though producing an overall effect that the ancients would not have thought of. The gifted forger of antique art is doing the same. And sometimes scholars unintentionally pursue the same path in constructing hypotheses to explain a very fragmentary past.

Egyptian temple architecture recalled a lost and largely mythical past of primitive simplicity. What we know and the builders of Edfu temple did not is the relatively late and to a degree artificial nature of the myth behind the ideal type of shrine. The Step Pyramid shows that it arose from the rejection of Early Dynastic brick architecture that had demonstrated, in the palace-façade style, potential for proclaiming places of power. By the Third Dynasty this style had been in Egypt for at least three to four centuries and could well have remained the model for all formal architecture, including temples, as it did in Mesopotamia. Instead, after the Step Pyramid, it was retained only in token form in funerary architecture: in the offering-places of tomb chapels, as a way of decorating sarcophagi, and as decoration for a section of wall around the royal burial chamber. Henceforth, formal temple architecture looked for inspiration to what the Egyptians considered to be their roots, a world of tent shrines and no palaces, blotting out a distinctive aspect of the early state. Just as the political history of ancient Egypt was shaped by a mythical view of the past, so the history of Egyptian formal temple architecture is a record of deference to another myth.

The re-codification of architectural form in the Third Dynasty did not, however, provide a model for ceremonial architecture which all desired to follow at once. No general rebuilding programme followed in the provinces, as the first part of this chapter showed. The new style was an intellectual creation of the court. It was confined at first to the royal tomb, and was used as a guide elsewhere only in cases of fitful royal patronage. The form of the royal tomb itself underwent major re-codification again at the end of the Third Dynasty, though this was as much a matter of function and meaning as of style. The eternal palace, which is what much of the Step Pyramid enclosure was intended to be, was replaced by a temple to the king's spirit and to the sun dominated by the true pyramid, a geometrically rendered version of the *benben*-stone in deference to grand and more abstract knowledge which increasingly made the sun god into the source of all power. But now and later new ideas remained true in forms to the

ideal types that we first meet as monumental architecture in the Step Pyramid. Ceremonial architecture well illustrates the Egyptian genius for clothing change in traditional costume.

The role of individual initiative

The instrument of change was personal intervention. We have to think in terms of great artists and architects. But the ancient myth that whatever was new and admirable was in fact true to the past allowed no room for the recognition of individual genius. The initiative in art and architecture was articulated by royal decree. The process is documented in the Berlin Leather Roll.[46] This is a New Kingdom copy of a building text of King Senusret I of the early Twelfth Dynasty. It begins with a formal 'appearance' of the king in his palace, before his assembled courtiers. He opens with an oration on his own divinely appointed destiny, then announces his plan: the construction of a temple for the god Atum. The motive is not disinterested concern for the gods. It is expressed in the pragmatic observation that the best means of immortality is a building constructed in one's own name. 'A king who is evoked by his works is not doomed.' His courtiers offer deferential support for the scheme, emphasizing the personal benefit for the king himself: 'When your temple is built, it will provide for the altar. It will give service to your image. It will befriend your statues in all eternity.' Finally comes the action. The king appoints the architect:

> the royal seal-bearer, sole companion, overseer of the two gold-houses and the two silver-houses, and privy-councillor of the two diadems: It is your counsel that carries out all the works that my majesty desires to bring about. You are the one in charge of them, who will act according to my wish … Order the workmen to do according to your design.

This is, for an Egyptian text, an unusually frank statement on royal delegation of creativity. But it is notable who the architect was, or rather was not. No name is given, and the man's titles have no specific reference to building at all. We cannot, on the basis of his titles, call him an architect. We know of dozens of officials with titles of this kind from the Middle Kingdom, but if they were great artists or architects we cannot tell. The great architect's skill was perceived as admirable performance of a royal commission, on the same level as organizing a large and difficult quarrying expedition, or clearing

navigable channels through the rocky barriers of the First Cataract at Aswan. It was not a deliberate anonymity. Some draftsmen and builders who did little else with their lives used these callings as their official titles, and so we can identify them. It reflects more the Egyptian lack of awareness of or interest in abstract divisions of knowledge. Art and architecture were parts of the stream of directed activity that emanated from the court. The process worked simply because an intuitive appreciation of what was really good ensured that good artists and imaginative architects were promoted at the expense of bad ones. But they were applauded for their success as good officials rather than as good artists or architects.

The case of the builder of the Step Pyramid provides another angle from which to view the question of who the real creators were. We have no ancient account of the building of the Step Pyramid, yet we instinctively recognize in it a work of architectural genius. This remote and poorly documented period has in fact provided us with the name of a great man of Djoser's court, Imhotep.[47] On the base of a statue of Djoser from the Step Pyramid Imhotep's name is carved, together with his titles: 'seal-bearer of the King of Lower Egypt, first one under the king, administrator of the Great Mansion, prince, chief of seers'. On the wall of the unfinished step pyramid of Djoser's successor (King Sekhemkhet) his name occurs again, simply as 'Seal-bearer of the King of Lower Egypt, Imhotep.' From the discovery of this material Egyptologists have made the not unreasonable assertion that Imhotep was the man behind the Step Pyramid. Imhotep was also one of the lucky few who achieved long posthumous fame in ancient Egypt. His name was honoured 1,500 years later in the New Kingdom, but not as an architect. He was famous as the author of a set of thoughtful sayings. 'I have heard the words of Imhotep and Hordedef, with whose discourses men speak so much,' says one song, pairing him with another famous sage of old, one of the sons of King Khufu. Imhotep's fame did not stop here. By the Twenty-sixth Dynasty he had become a minor god, the son of the god Ptah of Memphis, and healing was to become his speciality so that the Greeks identified him with their god of healing, Asklepios. In some late texts he is given a set of titles, but they are creations of the day: 'vizier, overseer of works, mayor'. He was correctly placed in the reign of King Djoser, and credited with the 'invention of building with hewn stone', but the history of Djoser's reign was recast into more modern shape. A papyrus of the first or second century AD, for example, sends Djoser and his vizier, Imhotep, off on a campaign to Assyria, a piece of

pseudo-history that is out of keeping with the world of Egypt's Third Dynasty.

We are probably right to identify Imhotep as the Step Pyramid's architect (though having done that we have simply played the ancient game of elevating names into knowledge; it really tells us nothing about him). Through this he achieved fame as a great official, and it was as a great official, with the inevitable attribute of being 'wise', that he was remembered. It was the fact of his success that counted, not the means – architectural genius – by which he acquired it. Indeed, it would have been contrary to the myth-world of his architecture if it had been given a historical point of origin. This raises another conundrum for ourselves. We must accept that from time to time the Egyptians produced figures of great intellectual ability responsible for major changes in traditions. Yet the Egyptians remained without the means to conceptualize this. Tradition is not wholly a mechanical repetition of ancient forms that thereby provide a key to past times. It is subject to modification as time passes, which sometimes amounts to invention. Traditions can thus obscure the past as well as illuminate it. They answer current needs and are the products of ingenious minds.

When we look at Early Dynastic brick palace architecture and Preformal shrines and their associated objects it is possible to imagine that they could have formed the beginnings of a cultural and artistic tradition very different from the one that actually did develop. Or if, as with the Indus Valley civilization, Early Dynastic Egypt had advanced no further along a straightforward cultural trajectory and the early material was all that we had, our evaluation and interpretation of it would be rather different from the way it actually appears now: as a formative stage to something much richer and greater later on. This is another way of saying that Pharaonic culture was not a naturally evolved tradition. It was invented, but so successfully that it left the Egyptians (and to some extent ourselves) feeling that it was all somehow rooted in the country and in the psychology of the people in a most fundamental way.

At the heart of a cultural tradition is a trade-off between respect for past achievements and the accommodation of fertile and creative minds who look for something new. Ancient Egypt provides an early case history of the dynamics of the Great Tradition of culture: how it arose and was maintained as a living system, how it expanded at the expense of local traditions, and how it achieved the difficult balance between past and present. It also enlarges our understanding of the

scope of myth in society. The previous chapter was devoted to showing how the Egyptians wrapped history and political power in myth. This chapter has attempted to do the same with material culture. Myth is not only a narrative form of expression. Myth statements that do not require verbalization can be conveyed powerfully through art and architecture. They provide a distinctive dimension to the assault on the senses that lies at the heart of state ideologies.

Notes

1E. Bloxham, *CAJ* 25 (2015), 789–814 surveys the ancient Egyptian interaction with this quarry landscape.

2Translation is in Breasted, *Ancient Records* I, 211–17.

3G. Castel and G. Soukiassian, *BIFAO* 85 (1985), 285–93; Régen and Soukiassian, *Gebel el-Zeit*; Bard, *Encyclopedia*, 324–8.

4D. Zahan, *The Religion, Spirituality, and Thought of Traditional Africa*, Chicago, IL, and London, UCP, 1970, 19.

5M.C. Jedrej, *Ingessana: the Religious Institutions of a People of the Sudan–Ethiopian Borderland*, Leiden, New York and Cologne, Brill, 1995, Ch. 11, 99–115, the quote being from p. 100.

6Vercoutter, *Mirgissa* I, 307–62; J. Vercoutter, *RdÉ* 16 (1964), 179–91; Pinch, *Votive Offerings* includes discussion of most of the Hathor shrines.

7P. Munro, *ZÄS* 88 (1962), 48–58. Quirke, *Exploring Religion*, 62–5, discusses the evidence for a shrine near Badari where small glazed objects had been left, and makes a possible link with the god Seth, in the form of a hippopotamus, known to have been honoured in the nearby town.

8J.F. Borghouts, *Ancient Egyptian Magical Texts*, Leiden, Brill, 1978, 32; Pinch, *Votive Offerings*, 211–21 provides an extensive discussion of the meaning of such figurines.

9Dreyer, *Elephantine* VIII; a convenient summary of the early development of the town in general is *Elephantine: the Ancient Town*. Bussmann, *Provinztempel* is a detailed treatment of most of the shrines and associated material discussed in this chapter. For the temple of Senusret I, see W. Kaiser et al., *MDAIK* 44 (1988), 153, Abb. 7.

10W. Kaiser, G. Dreyer, R. Gempeler, P. Grossmann, G. Haeny, H. Jaritz and F. Junge, *MDAIK* 32 (1976), 67–112, esp. 78–80; Strudwick, *Texts*, 134.

11R. Bussmann, 'Pepi I and the temple of Satet at Elephantine.' In R. Mairs and A. Stevenson, eds, *Current Research in Egyptology 2005*, Oxford, Oxbow, 2007, 16–21; Strudwick, *Texts*, 133.

12Both figure in the scenes beneath the Step Pyramid at Saqqara, for example (Figures 2.21 and 2.22, pp. 101 and 103). Baboon and scorpion images were still included amongst the temple furniture of the pyramid of King Neferirkara of the Fifth Dynasty at Abusir, see Posener-Kriéger, *Les archives*, 87–98.

13D. Eigner, 'A temple of the early Middle Kingdom at Tell Ibrahim Awad.' In van den Brink, *Nile Delta*, 69–77; W.M. van Haarlem, *EA* 18 (2001), 33–5; W.M. van Haarlem, *EA* 20 (2002), 16–17; T.A. Sherkova, 'Seven baboons in one boat: the interpretation of iconography in the context of the cult belonging to the temple at Tell Ibrahim Awad.' In Z. Hawass and L. P. Brock, eds, *Egyptology at the Dawn*

of the Twenty-first Century: Proceedings of the Eighth International Congress of Egyptologists, Cairo, 2000 2, Cairo and New York, AUC Press, 2003, 504–8; Bussmann, *Provinztempel*, 105–8, 118–19.

14 It has been argued that the Middle Kingdom Tell Ibrahim Awad building has a plan influenced by shrines from Early Bronze Age Palestine, M. Bietak, 'The Early Bronze Age III temple at Tell Ibrahim Awad and its relevance to the Egyptian Old Kingdom.' In Z. Hawass, Peter Der Manuelian and R. B. Hussein, eds, *Perspectives on Ancient Egypt: Studies in Honor of Edward Brovarski*, Cairo, Conseil Suprême des Antiquités de l'Égypte, 2010, 65–77.

15 Chłodnicki et al., *Tell el-Farkha*; K.M. Ciałowicz, 'The Predynastic/Early Dynastic Period at Tell el-Farkha.' In Teeter, *Origins*, 55–64.

16 Petrie, *Abydos* I, II; B.J. Kemp, *MDAIK* 25 (1968), 138–55; B.J. Kemp, *GM* 8 (1973), 23–5; B.J. Kemp, *Antiquity* 51 (1977), 186–9; Dreyer, *Elephantine* VIII, 47–58; Bussmann, *Provinztempel*, 87–90, 117; Strudwick, *Texts*, 98–101, 102–3, 106.

17 Mond and Myers, *Temples of Armant*, 29, and the section drawing on Pl. II.

18 A.J. Spencer, *Catalogue of Egyptian Antiquities in the British Museum* V. *Early Dynastic Objects*, London, BM, 1980, 67, Pl. 55, no. 483.

19 A small factory which actually made these figurines and which dates to the Old Kingdom and possibly into the Middle Kingdom has been found beside the ancient town of Abydos. See M.D. Adams, 'The Abydos settlement site project: investigation of a major provincial town in the Old Kingdom and First Intermediate Period.' In C.J. Eyre, ed., *Proceedings of the Seventh International Congress of Egyptologists, Cambridge 3–9 September 1995*, Leuven, Peeters, 1998, 19–30, p. 28.

20 Quibell and Petrie, *Hierakonpolis* I; Quibell and Green, *Hierakonpolis* II; Adams, *Ancient Hierakonpolis*; Fairservis, *Hierakonpolis 1978*; W.A. Fairservis, *Excavation of the Archaic Remains East of the Niched Gate, Season of 1981*, Poughkeepsie, NY, Vassar College, 1986; Adams, *Ancient Nekhen*; Dreyer, *Elephantine* VIII, 37–46; Bussmann, *Provinztempel*, 48–50, 117; R. Bussmann, *JEA* 100 (2014), 311–37; L. McNamara, 'The revetted mound at Hierakonpolis and early kingship: a re-interpretation.' In Midant-Reynes and Tristant, *Origins*, 901–36.

21 Arnold, *Qasr el-Sagha*, 22–3, where a Middle Kingdom date for the Hierakonpolis building is preferred.

22 The date of this image is not easily discernible from its style, to the extent that a New Kingdom date can be argued; Bussmann, *Provinztempel*, 51, 198; M. Eaton-Krauss, *GM* 42 (1981), 15–18; U. Rössler-Köhler, *MDAIK* 34 (1978), 117–25. Beyond this, the date and meaning of almost every aspect of the site have been questioned at some point. I have followed a fairly conservative line of interpretation.

23 Photographs taken at the time are in B.J. Kemp, 'Architektur der Frühzeit.' In Vandersleyen, *Das alte Ägypten*, 99–112, 104, Abb. 1; Adams, *Ancient Nekhen*, 60, Fig. 21.

24 Quibell and Petrie, *Hierakonpolis* I, 6, Pl. II; Quibell and Green, *Hierakonpolis* II, Pl. LXXII; R. Engelbach, *JEA* 20 (1934), 183–4; Adams, *Ancient Hierakonpolis*, 17.

25 Quibell and Green, *Hierakonpolis* II, 53, Pl. LXXII; Adams, *Ancient Hierakonpolis*, Frontis.

26 Petrie, *Koptos*; B.J. Kemp, A. Boyce and J. Harrell, *CAJ* 10 (2000), 211–42; B. Williams, *JARCE* 25 (1988), 35–59; L. Baqué-Manzano, *BIFAO* 102 (2002), 17–54.

27 B. Adams, *Sculptured Pottery from Koptos in the Petrie Collection*, Warminster, A&P, 1986. The quotation is from Petrie, *Koptos*, 5. Also Bussmann, *Provinztempel*, 82.

In view of the circumstances of finding, no clear date can be given to this material, although Petrie claims that Old Kingdom pottery lay in the vicinity. A similar piece was amongst the material found by Petrie at Abydos, see S.P. Harvey, 'A decorated protodynastic cult stand from Abydos.' In Manuelian, *Studies* I, 361–78. The suggested date for this piece is from before the First Dynasty.

28 B. Adams and R. Jaeschke, *The Koptos Lions* (Contributions in Anthropology and History 3), Milwaukee, WI, Milwaukee Public Museum, January 1984.

29 Modern and ancient references to the hill are collected in W.C. Hayes, *JEA* 32 (1946), 9, n. 5.

30 C. Robichon and A. Varille, *CdÉ* 14, no. 27 (1939), 82–7; D. Arnold, 'Architektur des Mittleren Reiches.' In Vandersleyen, *Das alte Ägypten*, 161–3, Abb. 36; Arnold, *Tempel Mentuhotep*, 7–8, 22; Bussmann, *Provinztempel*, 76, 118.

31 Robichon and Varille, *Temple primitif*. F. Relats Montserrat, *GM* 240 (2014), 123–5 reports on work on the documentation from this largely unpublished excavation; see also the comments by Arnold, *Temple Mentuhotep*, 76–8.

32 I. Regulski, *SAK* 38 (2009), 259–74.

33 J. Vandier, *Moʾalla*; *la tombe d'Ankhtifi et la tombe de Sébekhotep*, Cairo, IFAO, 1950.

34 Petrie, *Abydos* I, 4, Pl. III.48. Note also the entry on the Palermo Stone, Wilkinson, *Annals*, 138, Fig. 1.

35 Pyramid Texts, Utterance no. 600. R.O. Faulkner, *The Ancient Egyptian Pyramid Texts*, Oxford, Clarendon Press, 1969, 246; Pritchard, *Texts*, 3; Allen, *Genesis in Egypt*, 13–14.

36 A good introduction to ancient Egyptian pottery is J. Bourriau, *Umm el-Gaʾab. Pottery from the Nile Valley before the Arab Conquest*, Cambridge, CUP, 1981.

37 For the somewhat enigmatic Mesopotamian connection, see H. Frankfort, *The Birth of Civilization in the Near East*, London, Williams & Norgate, 1951, 100–12; H. Frankfort, *AJSL* 58 (1941), 329–58; H.J. Kantor, *JNES* 1 (1942), 174–213; H.J. Kantor, *JNES* 11 (1952), 239–50; H.J. Kantor, 'The relative chronology of Egypt and its foreign correlations before the First Intermediate Period', in R.W. Ehrich, ed., *Chronologies in Old World Archaeology*, 3rd edn, Chicago, IL, and London, UCP, 1992, I, 3–21; II, 2–43; H.S. Smith, 'The making of Egypt: a review of the influence of Susa and Sumer on Upper Egypt and Lower Nubia in the 4th millennium BC', in R. Friedman and B. Adams, eds, *Followers of Horus: Studies Dedicated to Michael Allen Hoffman*, Oxford, Oxbow, 1992, 235–46; B. Teissier, *Iran* (Journal of the British Institute of Persian Studies) 25 (1987), 27–53; P.R.S. Moorey, 'On tracking cultural transfers in prehistory: the case of Egypt and Lower Mesopotamia in the fourth millennium bc.' In M.J. Rowlands, K. Kristiansen and M.T. Larsen, eds, *Centre and Periphery in the Ancient World*, Cambridge, CUP, 1987, 36–46; P.R.S. Moorey, 'From Gulf to Delta in the fourth millennium BCE: the Syrian connection.' *Eretz-Israel* 21 (1990), 62*–69*; J.A. Hill, *Cylinder Seal Glyptic in Predynastic Egypt and Neighboring Regions*, Oxford, Archaeopress, 2004.

38 N. Jenkins, *The Boat Beneath the Pyramid: King Cheops' Royal Ship*, London, T&H, 1980; P. Lipke, *The Royal Ship of Cheops*, Oxford, British Archaeological Reports, 1984; Landström, *Ships*, 26–34; G.A. Reisner, *A History of the Giza Necropolis II. The Tomb of Hetep-heres the Mother of Cheops*, Cambridge, MA., HUP, 1955, 23–7, Pl. 5.

39 On the goddess Bat, see H.G. Fischer, *JARCE* 1 (1962), 7–24; H.G. Fischer, *JARCE* 2 (1963), 50–1; *Nekhen News* 15 (2003), 8–9; 17 (2005), 15; S. Hendrickx and R. Friedman, *GM* 196 (2003), 95–109; also W. Kaiser, *MDAIK* 39 (1983), 261–96.

40 P. Spencer, *The Egyptian Temple: a Lexicographical Study*, London, KPI, 1984, 125–30.

41 Reymond, *Mythical Origin*; C. Rossi, *Architecture and Mathematics in Ancient Egypt*, Cambridge, CUP, 2004, 161–73.

42 Recall the warning that arises from the texts quoted in note 70 to Chapter 1!

43 Naville, *XIth Dynasty Temple* II, 14–19, Pls XXIII and XXIV.

44 Arnold, *Tempel Mentuhotep*, 28–32, 76–8.

45 R. Stadelmann, *Die ägyptischen Pyramiden*: *Vom Ziegelbau zum Weltwunder*, Mainz, von Zabern, 1985, 229, Abb. 74.

46 A. de Buck, *Studia Aegyptiaca* I, Rome, Pontificium Institutum Biblicum, 1938, 48–57; Lichtheim, *Literature* I, 115–18.

47 Ray, *Reflections*, 5–22; D. Wildung, *Imhotep und Amenhotep – Gottwerdung im alten Ägypten*, Berlin, Deutscher Kunstverlag, 1977; D. Wildung, *Egyptian Saints: Deification in Pharaonic Egypt*, New York, New York University Press, 1977.

Part II

The provider state

4

The bureaucratic mind

The material achievements of ancient states – pyramids, conspicuous wealth, palaces, temples, conquests – depended on a particular skill: administration of resources. Although its basic purpose was to manipulate the economic environment for the benefit of the elite, in so doing benefit was incidentally spread to a significant sector of the population. This was achieved essentially through taxation to bring in resources and then through their redistribution as rations to an element of the population – probably a large one – engaged temporarily or permanently on work for the state. The first part of this classic resource cycle of early states – taxation – is best illustrated for Egypt by material from the New Kingdom, reserved for Chapters 6 and 7, although traces of such a system are present in much earlier written sources (Figure 2.2, p. 62, contains reference to a biennial enumeration of Egypt's wealth from the Second Dynasty). This chapter is more about bureaucracy as a shaping force in society and the consequences of large-scale ration distribution for the relations between state and population. From here, the following chapter illustrates, largely through archaeological examples, the impact of this kind of thinking on the shaping of the settlements where many Egyptians lived.

A developed bureaucratic system reveals and actively promotes a specific human trait: a deep satisfaction in devising routines for measuring, inspecting, checking, and thus as far as possible controlling other people's activities. This is a passive and orderly exercise of power in contrast to direct coercion. It draws upon a particular aptitude, as distinctive and important for a society as the genius of its artists and architects, or the bravura of its military men. When dealing with ancient Egypt we call a member of this class a 'scribe'. It is a fair translation of an Egyptian word that means simply 'one who writes, a writing man'. There is a tendency in modern societies where literacy is widespread to denigrate the junior official or clerical worker. But this is a luxury inappropriate to less developed

societies. Where most are illiterate the writing man holds the key to the power that administration bestows. In Egypt scribes were not only amongst the elite, they knew it, and said so plainly. 'Be a scribe', ran the advice of teachers, 'it saves you from toil, it protects you from all manner of labour.' 'Be a scribe. Your limbs will be sleek, your hands will grow soft. You will go forth in white clothes, honoured, with courtiers saluting you.'[1] And many a senior figure in the state included 'scribe' amongst the accumulated titles of his curriculum vitae. The reader of this chapter should suppress any feeling of disdain associated with words like 'bureaucracy' and 'scribe'. In the Egyptian world both attracted a very different set of values. At the same time, although 'scribes' defined themselves as an elite and extolled the virtues of the written word, the workings of Egyptian administration depended heavily upon a broader group of people, whose grasp of conventional writing was more limited. Archaeological evidence implies that they played their part through recognition of visual cues, particularly as contained within seals and sealings. They blurred the boundary between scribes, as they defined themselves, and the rest of society.[2]

Entering the scribal mind

Large numbers of administrative written sources have survived from ancient Egypt. We will begin with a set of early texts which reveal vividly the bureaucratic scribe's concern with system and detail. It is the papyrus archive from the pyramid temple of King Neferirkara of the Fifth Dynasty at Abusir.[3] It dates mostly to the reign of King Isesi (*c*. 2340–2312 BC), thus to at least 50 years after the death of Neferirkara (in *c*. 2363 BC). In layout and purpose it is also very similar to an archive (found at a Red Sea port, Wadi el-Jarf) which, in being dated to the end of the reign of Khufu (*c*. 2447 BC), is the earliest example of its kind from Egypt (see further below, p. 181).

By the beginning of the Fourth Dynasty a standard royal tomb layout had developed. Burial was within or beneath a pyramid. The offering-cult for the king's eternal wellbeing was performed in a mortuary temple attached to the pyramid's east face. A causeway linked this temple with a separate one on the valley floor (the Valley Temple) which, so it has often been thought, accommodated the rites over the king's body prior to burial. Central to the cult was the presentation of food and drink offerings. Staff were needed for this

and for other ceremonies, and further members were required to protect the building and its equipment. All were paid in kind, in commodities, which included a basic ration of bread and beer and grain, and additional items such as meat and cloth. The receipt of income and its subsequent distribution as rations set in motion its own administrative cycle. Although the income could be supplied by the palace of the living king, a greater security of source was obtained by establishing a separate foundation in perpetuity. This consisted essentially of agricultural estates (or domains), nominally owned by the spirit of the dead king. In practice, the estates sent their produce to the palace which then allocated it to the royal mortuary cult (its proper owner) and also to other temples and government departments, a sign already of a pragmatic approach to what, at first sight, seems to be sacred property. In the New Kingdom the balance changed somewhat, with temples (including royal mortuary temples) having a more direct role in managing not only their own lands but also lands that belonged to the king (see below, p. 255).[4]

The papyrus sheet illustrated in Figure 4.1 is a table of daily income written in an early style of hieratic which still maintained many of the outlines of the original hieroglyphic signs. We can recognize instantly a sensible tabular format, ruled in red and black ink. Each horizontal line is set aside for one day in a 30-day month, and contains mainly numerical entries in vertical columns. Each column bears a concise two- or three-tier heading, covering the supplying institutions, the kind of foodstuffs involved and (for the three right-hand columns) the status of the delivery.

name																
of the	through deliveries sent to the residence						name of the	brought from the palace			the altar of Ra in the solar temple			in crates		
porter	jars of ritual drink	jars of beer	jars of flour	heart bread	pyramid bread	hetja bread	place of origin	delivered, pafi bread, hetja bread, pyramid bread, beer			consignments of pafi bread			deliveries		
											balance	delivered	amount due	balance	delivered	amount due
								15		15			14			
temple								15		15			14			
employees							estate of Kakai	15		15			14			
									15	15			14			
	1	1	1	1	1	1	In Shedefwi		15	15		30	14			
									15	15	15		14			
Nesuth-Kakai		1		1	1		estate of Kakai	15		15	15		14			
								15		15	15		14			
Nesuwi-Kakai		1		1	1		estate of Kakai	15		15	15		14			
son of								15		15	15		14	15		15
Hatu		1		1	1	1	Ded-Snefru		30	15	15		14	15		15
										15		14	14			
								15		15		14	14			
								15		15		14	14			
								15		15		14	14			
		1		1	1		estate of Kakai		30	15		14	14			
										15		14	14			
								15		15		14	14			
								15		15		14	14			
										15		14	14	15		15
										15		14	14	(15)		(15)
										15		14	14			
Nesuwi-Kakai	2 bundles of beer				100	(?)	brought from the altar of Ra			15	(14)		14			
										15	(14)		14			
	mixed			mixed						15	(14)		14			
brought by	30			30			solar temple			15	(14)		14			
boat										15		14	14			
	1	1	1	1	1	1	In Shedefwi			15		14	14			
										15		14	14			
										15	14		14			

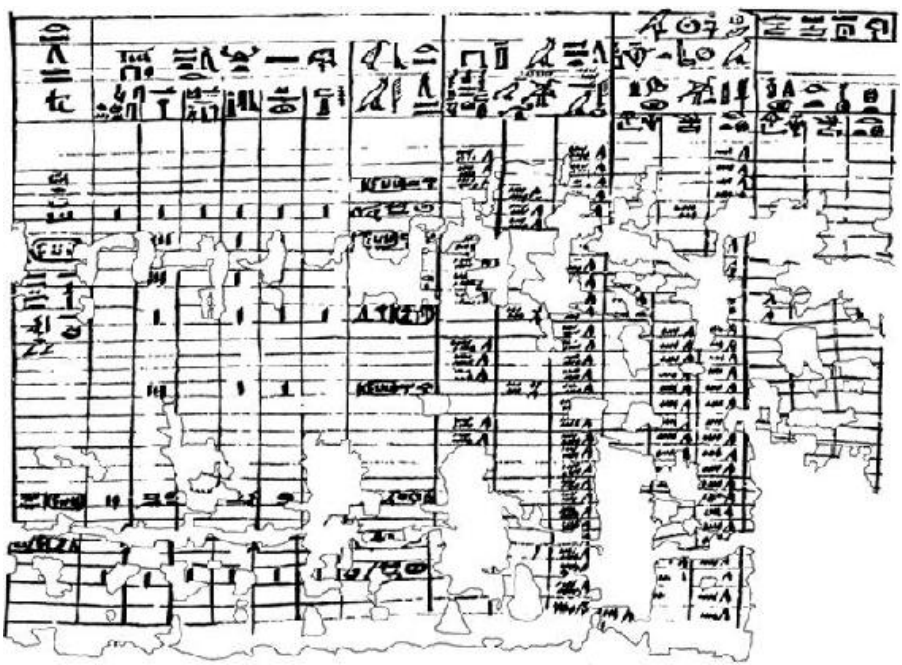


Figure 4.1 Sheet of accounts of daily income over the period of one month, from the administrative archive of an Old Kingdom pyramid, that of King Neferirkara of the Fifth Dynasty at Abusir; see also Figure 4.3, pp. 170–1, for another part of the archive, and Figure 5.6, p. 205 for site plan. After Posener-Kriéger and de Cenival, *Abu Sir Papyri*, Pl. XXXIV.

The supporting foundation, composed of individual estates, was cleverly incorporated into the formal decorative schemes at pyramid

temples, illustrating once again the Egyptian genius for deft symbolic presentation of humdrum reality. Few peoples have turned the collection of rents and gathering of taxes into subject matter for court art. Each funerary estate, or domain, appears as an offering-bearer, individually named. We do not have a set for Neferirkara's temple. For comparison we can turn to the Valley Temple of King Sneferu at Dahshur (Figure 4.2).[5] They occupied a strip at the base of some of the internal walls. Each estate is personified as a woman bearing an offering-table. On the head is a sign-group reading: 'The town: Mansion of Sneferu'. In front of each is the name of the place, compounded from the name of Sneferu in a cartouche, with further signs to designate the nome (province). Altogether 34 estates belong to Upper Egypt, distributed amongst ten nomes (with the record of eight nomes missing). In Lower Egypt the record is fully preserved for only a single nome, and numbers four estates. This scattered pattern of landholding is typical for ancient Egypt. No details are given of the size of these holdings, but 2 *arouras* (16.4 ha) is cited in a few sources for other foundations although they could be larger.[6]

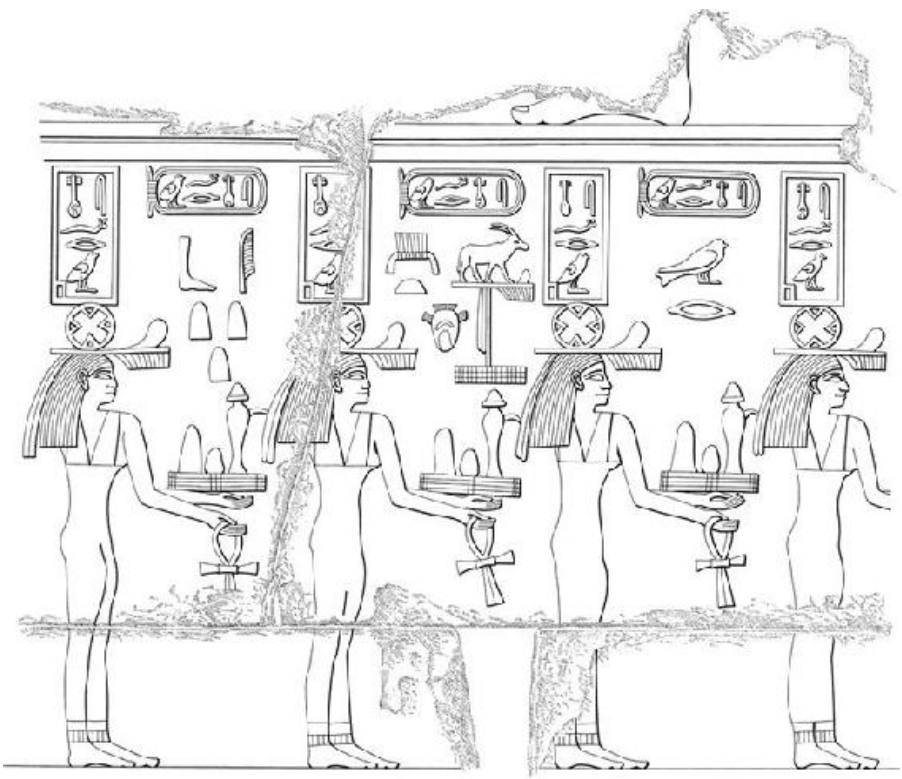


*Figure 4.2*Part of a list of estates providing the income for the pyramid temple of King Sneferu of the Fifth Dynasty at Dahshur. Each estate is personified as a female

bearer carrying a tray of food offerings. The name of each estate is written over and in front of each figure, in each case honouring the name of Sneferu. They are grouped according to nomes (administrative districts). In front of the second figure from the left is the heading 'Oryx nome', the area of Beni Hasan, with a picture of an oryx on a standard. After Fakhry, *Dahshur Reliefs*, Fig. 16 (redrawn by B. Garfi).

The temple staff was organized into groups for which the conventional modern term is 'phyle' (a Greek term meaning company, tribe). This was the common form of temple organization, with five phyles in the Old Kingdom, each one subdivided into two divisions, which apparently worked at different times. Each subdivision, of around 20 men, served for only one month in ten.[7] Presumably for the extended leave periods they reverted to agricultural or other work in their villages, so that the undoubted benefits of temple service – payments as well as prestige – were widely spread. Whatever ancient reasoning lay behind the system, the practical consequence was a sharing out of jobs by the state. The number of employees required was multiplied by many times, hugely increasing the numbers of people receiving partial support from the state. Because most of the jobs were only part-time the system itself was not clogged by the presence of unnecessary personnel.

In the course of its duty, each phyle undertook a complete inspection of the temple and its property. From the Neferirkara archive we know that the inspection included the seals on all doors and every item of temple equipment. The sheet illustrated in Figure 4.3 is an example of an inventory of this kind. Again a sensible tabular format meets the practical requirements. The items are not listed haphazardly. They are arranged according to an overall scheme of classification that includes an element of progressive subdivision to create subclasses within broader categories, so displaying a basic grasp of taxonomy of the kind that underlies modern knowledge. By the time of this archive the temple equipment was becoming worn. Exact details of damage are listed underneath each item, together with the numbers of items present. The fragment of table illustrated also reflects some kind of double-entry procedure which is not properly understood, for the space for each set of inspections is itself subdivided by double lines ruled in red to accommodate two sets of observations if necessary.

haematite	crystalline stone				flint	iron			
bowl: gold-plated	bowls		vases		ritual knife	blade	total of	offering-tables	
	black	white	black	white				small	large
							silver items		
1	2	1	1	1	1	2	23	2	1
	(?)	various repairs to rim & base (x2) (x2) & to sides	repairs to rim & base	repairs to sides; holed (x2)	handle chipped; repaired	chips missing; having been dropped		badly split; loose joints; corroded	badly split; loose joints; corroded
1	2	1	1	1	1	2	23	2	1
	(?)	ditto	ditto	ditto	handle & blade chipped	ditto		ditto	ditto
1	2	1	1	1	1	2	23	1	1
	ditto	ditto	ditto	ditto	ditto	ditto		ditto	ditto
	(?)	ditto	ditto	ditto	ditto	ditto		badly split; loose joints; holed	badly split; loose joints; holed
1	2	1	1	1	1	2	23	2	1
		(repairs) ditto	ditto	(chipped) ditto	ditto	ditto		ditto	ditto
1	2	1	1	1	1	2	23	2	1

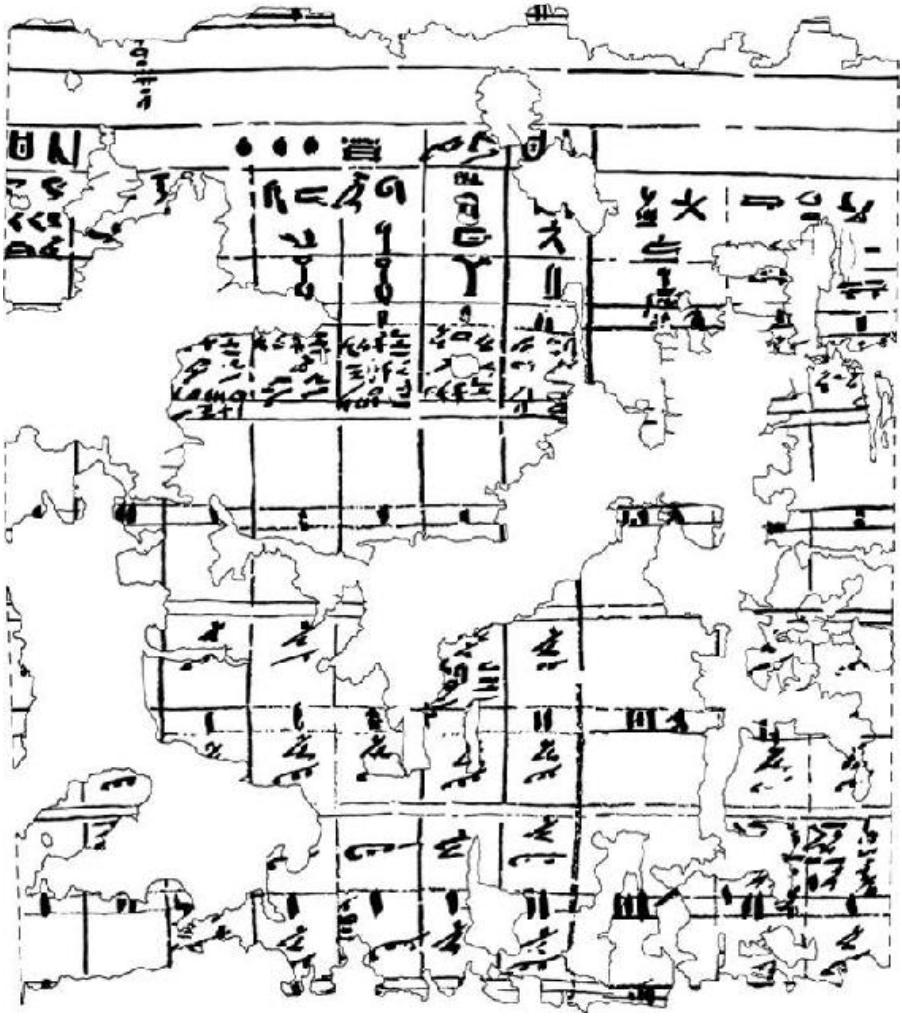


*Figure 4.3*Sheet of equipment inventory, from the same source as Figure 4.1, pp. 167–8. After Posener-Kriéger and de Cenival, *Abu Sir Papyri*, Pl. XX. The width of the portion illustrated is 18 cm.

One set of sheets covered an activity that the ancient Egyptians rated very highly: sealing. Instead of sealing-wax the Egyptians used a very fine grey clay which took the impression of a seal and then set very hard around a binding of cord. In the Old Kingdom the seals themselves were little stone cylinders bearing incised hieroglyphs that could be rolled across the clay. In the Middle Kingdom they were replaced by stamp seals carved in the shape of scarab beetles, the design or inscription scratched into the flat base, and later by bronze finger rings into which the design for creating a seal was incorporated. Seals were fixed to rolled-up letters and other documents, around the

knobs on wooden chests to secure the lids, around the necks of sacks and jars, and over the wooden bolts which closed doors. The relevant sheet from the Neferirkara archive deals with the seals on doorways of rooms in which sacred boats were stored.[8]

The physical barriers to theft in ancient Egypt were not very strong. No ingenuity was displayed in inventing locks. Breaking and entering would have been quite simple, and the long history of tomb robbery in ancient Egypt shows that some people were strongly motivated towards theft. The great fuss that was made over sealing, including the repeated inspection of seals, was a psychological ploy. It concentrated the minds of those responsible on a specific point of security, laid security open to bureaucratic control, and the link between sealings and the keeper of the seal became a bond of responsibility. The system was probably more effective than one might think at first. It created a little field of symbolic power around storeroom doors, as well as around boxes, sacks and sealed documents. The elements used in the designs of seals could also be recognized (without necessarily being 'read') by people within the administrative system who were not fully literate.

Much of the Neferirkara archive reflects methodical routines – inspections and duty rosters – where the units recorded were single and indivisible, namely human beings and manufactured objects. But many units of administration (land and commodities), in being divisible, required exact quantification as well. Many texts reveal how arithmetical procedures were developed to facilitate this.[9] At the risk of deterring the reader a few examples will be cited to convey the flavour of this kind of work, which occupied a significant number of those who ran the ancient Egyptian state. One feature of ancient Egyptian mathematics that is a major obstacle to understanding should be noted at the outset: with the sole exception of $^{2}/_{3}$, no fraction was ever written which had a numerator greater than one. Thus the fraction $^{3}/_{4}$ was written by them as $^{1}/_{2} + {}^{1}/_{4}$. The fraction $^{6}/_{7}$ was written as $^{1}/_{2} + {}^{1}/_{4} + {}^{1}/_{14} + {}^{1}/_{28}$ and so on. Although we find it cumbersome because of its unfamiliarity, it is a mathematically respectable method, and Egyptian scribes used it fluently and to great practical effect. Furthermore, at moments of uncertainty they could refer to arithmetic manuals. These often deal with problems that are quite complex, but it reflects the Egyptian mentality that each problem is dealt with as a specific and individual case rather than as an application of general mathematical principles. Practised scribes must have developed a degree of mathematical intuition, but the idea

of pursuing this as an end in itself – to create the subject of mathematics – did not occur to them.

Rations

An important area of arithmetical administration was food supplies: rations. The word 'rations' has a special significance. No one had yet invented money. In the modern world money has become such a basic part of life that it is easy to conclude that a world without it would be a simple place. Where there is no money people have to barter rather than buy and sell, and the word 'barter' is itself stamped with a colonial image of beads and trinkets changing hands in savage lands. This is one of the comfortable myths by which modern people distance themselves from the past and regard their world as being not only much better but a different kind of place altogether.

Money does, indeed, provide an easy way of doing business at every scale. Electronic commerce takes away the need even to carry notes and coins, let alone beads and trinkets. But non-money systems have, in the past, managed remarkably well. They exemplify a general characteristic of cultures: that systems tend to be adequate for the demands placed upon them. People cope. The ancient Egyptian economy supplies a good example. The Egyptians managed large economic operations over long periods of time with a moneyless system that was adequate. They were able to do this partly because in the ancient world in general people remained in far closer handling contact with real material wealth – commodities – than we do, and partly because they had developed an accounting system that was halfway towards the abstraction of 'money'. It was halfway in the sense that its language was that of commodities – loaves of bread, jugs of beer, *hekat*s of wheat and so on – but its procedures allowed for the manipulation of quantities which was not necessarily matched by the movement, or even existence, of the substances themselves. It was a typical ancient compromise: abstraction disguised by concrete terminology. We will meet it again in Chapter 7, in looking at the way that goods were priced and how they were bought and sold (Figure 7.6, p. 310). It is also another lost world of the mind. For it is now very difficult to reconstruct the whole system in a way that pays suitable heed to the niceties of the ancient documents and satisfies modern common sense. This will become apparent in the next few paragraphs.

Rations administration lay at the heart of the system. In the absence of money people were paid in kind, in commodities. In effect this was a 'wage', but on account both of the commodity-based nature of the recompense and of the modern connotations of personal economic freedom of the word 'wage', the term 'rations' is preferable. But the distinction is somewhat artificial.

The basic cereal food cycle from harvest to ration distribution involved a series of points of scribal intervention. The initial yield of grain was measured at the threshing-floor by means of wooden scoops of a given capacity, which gave quantity in terms of a *hekat*, estimated to have been 4.78 l. Transport, frequently by river, to the granary involved scribal checking to ensure no theft took place en route. Another group of scribes receiving the delivery at the granary checked it again. They or their superiors would already know the maximum capacity of the individual silos, even if they were circular, by calculation:

A circular container of 10 by 10 cubits.
Take away $^{1}/_{9}$ of 10, thus $1^{1}/_{9}$; remainder $8^{2}/_{3} + {}^{1}/_{6} + {}^{1}/_{18}$.
Multiply the $8^{2}/_{3} + {}^{1}/_{6} + {}^{1}/_{18}$ by $8^{2}/3 + {}^{1}/_{6} + {}^{1}/_{18}$ (i.e. square it); result: $79^{1}/_{108} + {}^{1}/_{324}$.
Multiply the $79^{1}/_{108} + {}^{1}/_{324}$ by 10; it becomes $790^{1}/_{18} + {}^{1}/_{27} + {}^{1}/_{54}$.
Add a half to it: it becomes 1185.
Multiply the 1185 by $^{1}/_{20}$, giving 59¼. This is the amount that will go into it in quadruple-*hekats*, namely 59¼ hundreds of quadruple-*hekats* of grain.[10]

The interest of this model calculation is that the container is circular. The first two steps involve squaring $^{8}/_{9}$ of the diameter, which yields a very fair approximation to the correct answer that we would find by using a formula involving the constant, *pi* (π).

The next points of scribal intervention were at the beginning and end of the milling, and at subsequent stages in the production of the staple elements of the Egyptian diet: bread and beer. Ancient beer, readers should note, was not only mildly alcoholic but also nutritious. Its prominence in Egyptian diet reflects its food value as much as the pleasurable sensation that went with drinking it. Its centrality to life is represented by the fact that well-constructed breweries provide some of the earliest evidence in Egypt for communal organization within settlements (Figure 4.4 (1)).[11] Baking and brewing came near the end of the whole cycle of cereal production. For the scribes who painstakingly followed the progress of cereals from fields to ration payouts the essentially messy and labour-intensive processes of baking and brewing presented a challenge, and it was met by a simple but

ingenious solution.

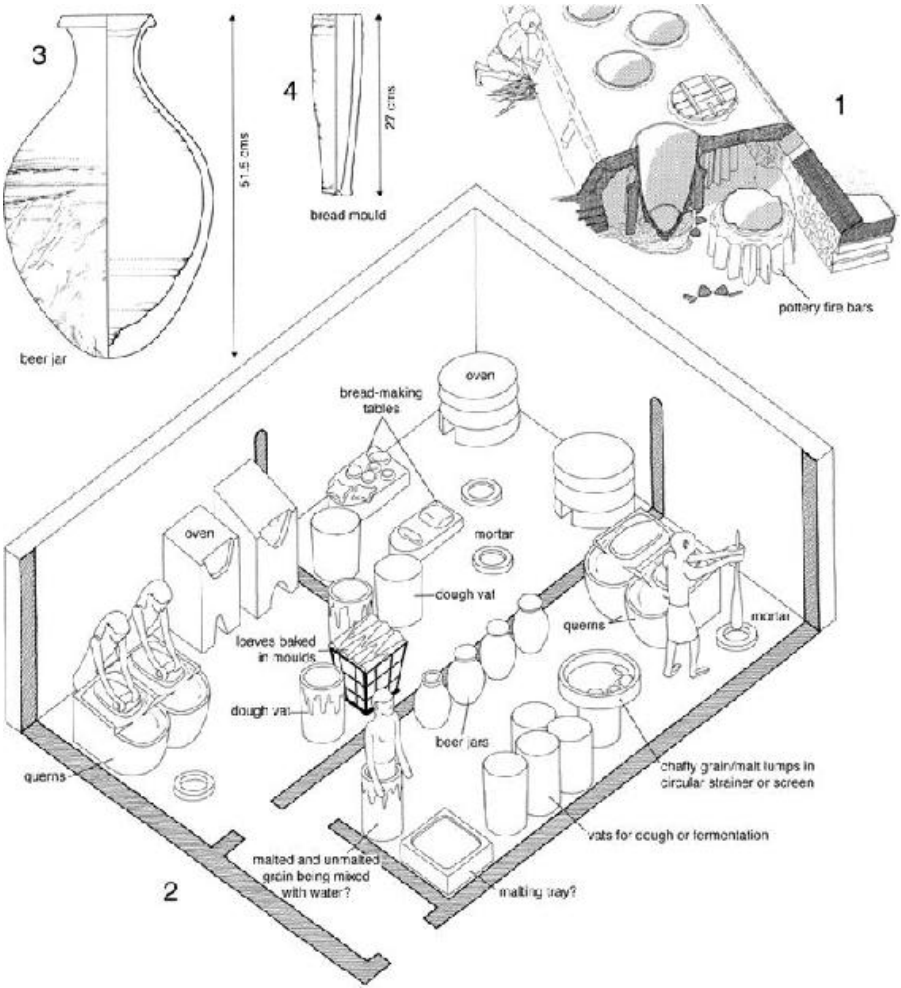


*Figure 4.4*Brewing and baking: an early industry. (1) Reconstruction of a predynastic brewery, based on an example found well preserved at Abydos. After T.E. Peet and W.L.S. Loat, *The Cemeteries of Abydos. Part III. 1912–1913*, London, EEF, 1913, 1–2, Figs, 1, 2; Pl. I. (2) The model bakery/brewery from the tomb of Meketra at Thebes, early Twelfth Dynasty. After Winlock, *Models*, Figs 22, 23, 64, 65. The two pots (3) and (4) are from the mortuary temple town of Amenemhat III at Dahshur. After Do. Arnold, *MDAIK* 38 (1982), 29, Abb. 5, 31, Abb. 7.

For the background – the realities of brewing and baking – we are very well supplied with evidence, in the form of detailed tomb pictures of the Old and Middle Kingdoms, and wooden models from the latter period. Both brewing and baking began with raw cereals and so had a common origin. It used to be widely thought that an essential part of the brewing process was the soaking and straining of lightly baked loaves rich in yeast, but the study of beer residues by

microscopy has shown that this is unlikely. Instead it now seems that Egyptian beer relied upon malting (allowing the grains to begin to sprout and so release their sugar) and, crucially, the mixing and blending of uncooked malt with cooked grains or malt.[12]

The model building illustrated (Figure 4.4 (2), from the tomb of Meketra, a high official of the early Twelfth Dynasty)[13] exemplifies a common subject of Egyptian art, the making of bread and beer seemingly side by side. It has two major parts, each with a subdivision. The outer door leads to a vestibule, to the right of which is the brewery and straight ahead is the bakery. The bakery is subdivided by a low partition wall, reflecting two different methods of baking, one to produce flat loaves, the other to produce cylindrical loaves baked in pottery moulds. On the floor lie several flat circular objects which must represent circular limestone mortars set into the floor, as are sometimes found in excavations. In the brewery part a man wields a long, wooden pestle to crush grain in one of them. This is an operation preliminary to grinding, which loosens the husks that tightly encase the grain (modern free-threshing wheat would not require this step). In both the bakery and brewery stand paired grindstones set in quern emplacements. Excavated evidence shows that the normal grindstone was an oval piece of quartzite or granite, rough underneath but with a smooth and slightly curved upper surface. Each stone was set into a mud-brick construction, sometimes built against a wall and then having the plan of a letter 'B'. The stone was set into the top of one half, with sloping surface, and the coarse flour and husks fell into the little trough formed by the mud-brick curb of the other half of the 'B'. The Meketra models lack the collecting trough, but are otherwise of this design. The miller stood behind the higher end and leant forwards over the stone, using a smaller stone for the crushing. The millers were normally women. The ground product would not have been an evenly textured flour, but a crushed mixture of flour and husks which needed to be sieved. Modern experiments have demonstrated that a reasonably fine flour is possible and that the idea that ancient bread as eaten (as distinct from loaves left at tombs and made by people who knew that no one was actually going to chew them) was gritty is a myth. In each of the bakery compartments are also two large kneading vats. In the inner compartment, they stand next to two low tables on which individual open loaves are made.

Not all bread came in the form of hand-formed loaves, however. A common practice was to bake some bread in pottery moulds. In the

Old Kingdom the moulds were large and heavy and designed to produce solid conical loaves (Figure 4.6, p. 184). By the Middle Kingdom they had evolved into long narrow tubes, still hand-made, rough on the outside, but with a fine smooth inner surface (Figure 4.4 (4)). They occur in large numbers on Middle Kingdom sites, and the practice continued into the New Kingdom, during which time the production of mould-baked loaves seems to have become restricted to shrines and temples, as if the loaves had become something special. Beside the doorway that connects the two compartments stands a square basket filled with loaves of just this shape. Each compartment also contains two ovens, but of a different design in each. In the inner compartment, they are of a standard cylindrical type with a hole in the ceramic wall near the bottom for inserting the fuel. The other two, however, are rectangular. Excavated evidence shows that these were used either for baking the bread in pottery moulds or for the initial firing of the moulds themselves.

The interpretation of the brewery equipment is not quite so certain. Cereal-processing by mortar and querns is catered for at the back of the room, and the large jars in a row against the partition wall are most likely to be for storing the finished beer. In terms of the Middle Kingdom pottery repertoire, the beer jars must have been a well-known type, also illustrated in Figure 4.4 (3). Some of them are shown with a broad low stopper made from mud. Opposite them stand five large cylindrical tubs presumably also made of pottery. On one rests a wide tray containing lumps. This is likely to be a sieve or screen through which the mixture of grain and malt, liberally watered, had to be pressed. A cloudy liquid ready for fermentation passed through, leaving behind in the sieve damp, chaffy lumps which were themselves edible and, from the malt, may have had a sweet, caramel-like taste. Just inside the door of the brewery-half of the model is a tall pottery vat. A man stands waist deep in it, holding on to its rim, as if mixing something by treading it with his feet. Could this be the two batches of malt and grain now combined with warm water? And the flat square tray close by: is this for spreading out the grain to allow malting to take place?

Baking and brewing contained elements that unavoidably thwarted a simple control of quantities as they passed from one stage to another. Water was added, dough rose, and a proportion of inedible matter was lost through milling and sieving. Loaves emerged in a variety of shapes, and the strength of beer was affected by the amount of water squeezed through the malt and grain mixture. The scribes'

approach was to treat the whole operation as a kind of 'black box': it was possible to measure what went in (either neat cereal grains or already milled flour), and what came out at the other end as quantities of loaves and vessels of beer. Ignoring what went on inside, input and output bore a simple relation to one another: the number of loaves and jugs of beer that came from a given quantity of grain or flour. This scale of values the Egyptians called *pesu* (or *pefsu*), which we can translate as 'baking value', and it represented a stage on the road towards mathematical abstraction. The *pesu* scale was set for the number of loaves or jugs of beer that could be obtained from one *hekat* of grain or flour (the milling of grain to produce flour increasing the volume of the active material).[14] The higher the value the smaller the loaves or the weaker the beer (or the smaller the jugs). *Pesu* enabled the scribe to calculate equivalences between loaves and jugs of different sizes and strengths. '155 loaves of baking-value 20 are equivalent to how many loaves of baking-value 30? You express the 155 loaves of baking-value 20 in terms of flour: thus 7½ + ¼ *hekats*. Multiply by 30: result 232½.'[15] In other words, divide 155 by 20 and multiply the result by 30.

Many ration lists and commodity accounts have survived. They tend to ignore *pesu* values.[16] They assume standardized jugs of beer, and the various kinds of bread can be grossed together as 'mixed' loaves. This assumes standardization, a reasonable step in thinking in view of the scale and ubiquity of the operations, in which those involved, including potters making beer jugs, would tend naturally to produce standardized shapes from a lifetime's practice. We do actually have an opportunity to check for ourselves. Although very few actual loaves have survived, we have substitutes. The commonest are the pottery moulds in which bread was baked. Thousands have been found on excavations. As already noted, they went through an evolution over time. In the Old Kingdom they turned out loaves that were in the shape of a squat cone, characteristically about 16–20 cm across the base. By the Middle Kingdom the cones had evolved into tall thin cylinders (see Figures 4.4 (4) and 4.6, pp. 174 and 184). Although so many have been discovered, they have never been examined from the point of view of how the loaves they turned out compare with ancient accounting practices and dietary needs. Photographs of some large finds do give the impression of reasonably standardized capacity within that particular group, which could have been maintained if, as has been suggested, they were themselves formed over reusable moulds (perhaps of wood).[17] Nevertheless,

examples from different sites and dates vary by quite a lot. There is no hint that they met a standard officially laid down. The scribe presumably performed his *pesu*-calculations periodically to test whole batches. This was not, however, the end of the story. Not all bread rations were in the form of mould-baked loaves. Soldiers at one of the Middle Kingdom Nubian fortresses (Uronarti) possessed wooden tallies in the shapes of their bread rations, with amounts of wheat and barley carved on them in hieroglyphs (Figure 4.5).[18] Some represent mould-baked loaves (of barley), but others flat round hand-made loaves (of wheat). These tallies look like the recipient's (a soldier's) own check on the value of his rations, calculated in terms of the grain allocation behind them rather than on the actual number of loaves received. They could have formed the basis of a demand to the scribe to check the *pesu*-value of a batch of mixed loaves issued as rations.

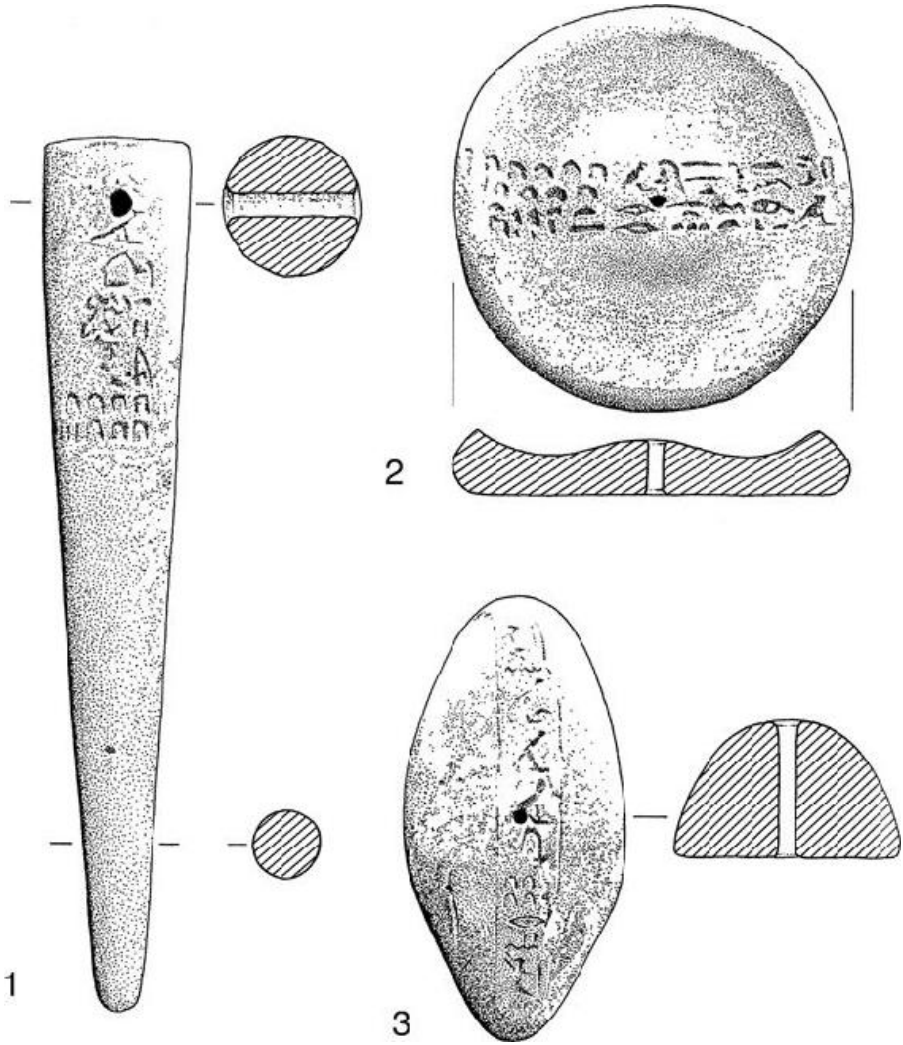


*Figure 4.5*Soldiers' bread-ration tokens, made from wood, plastered and painted. Each one is in the shape of a particular kind of loaf, and bears a short incised inscription, difficult to translate. (1) A cylindrical loaf of the kind baked in pottery moulds, height 24.7 cm; the hieroglyphs refer to 75 loaves for a soldier. (2) A round flat loaf with raised centre, diameter 12.8 cm; the hieroglyphs refer to 90 loaves from 1 *hekat* of wheat. (3) An oval loaf with flat base, length 12.7 cm; the hieroglyphs refer to 60⅔ loaves. From the late Twelfth Dynasty fortress of Uronarti in Nubia. After Dunham, *Uronarti*, Pls XXVII, XXVIII, and pp. 34–5.

Beer-jug capacity is more difficult for us to check. We know which was the common shape of Middle Kingdom beer jugs, and although most pottery from excavations is too broken to enable capacities to be calculated, many complete ones have been found. As with bread moulds, however, little study has been done to measure actual capacities with this question of standardization in mind. However,

modern drawings of such vessels found in different tombs in a single cemetery certainly look as though they reflect a range of sizes and only roughly met a standard.

It is typical of the ancient lack of interest in the idea of efficiency that standardization does not seem to have been a conscious goal. Scribes and potters (and bakers) were worlds apart. The gulf of status kept the scribe from breaking out of the limits of his own art, that of procedure and calculation, and his procedures arose from an acceptance that a crucial part of the operation was virtually beyond his control.

Real ration lists show that the regular wage or ration was calculated in terms of so many loaves of bread and jugs of beer, with extras sometimes appearing, such as cakes or wine.[19] A standard daily basic wage consisted of ten loaves and a measure of beer that could fluctuate between a third of a jug to one or even two whole jugs. This was what was thought fit for an ordinary labourer. Ration lists also show that as one moved upwards through the ranks of officialdom the distributions increased by multiples of the basic ration. This was sometimes expressed by listing those of higher rank as if they were more than one person: perhaps five, ten or even twenty men. The Rhind Mathematical Papyrus (a scribe's reference manual from the Middle Kingdom) helped the scribe cope with the consequences.

Method of distributing 100 loaves of bread amongst 10 men, if the skipper, the crew-leader and the doorkeeper (receive) double.
Its procedure: you add up the people to receive supplies: thus 13.
Divide the 100 loaves by 13. That makes $7 + {}^{2}/_{3} + {}^{1}/_{39}$ (i.e. $7\,{}^{9}/_{13}$).
Then you say: (this) is the consumption of the 7 men, (while) the skipper, the crew-leader and the doorkeeper receive double.[20]

Thus the ten men with unequal shares are temporarily converted into thirteen fictitious 'recipients' with equal shares. The seven 'one-man' shares are each $7{}^{9}/_{13}$; the three 'two-man' shares for the three officials amount to twice that quantity, that is, $15{}^{5}/_{13}$.

The Rhind Mathematical Papyrus also, however, envisaged more complicated cases of distribution where the scaling by rank was not done in simple multiples of one basic ration. '100 loaves for 5 men. ${}^{1}/_{7}$ of the rations for the three superiors goes to the two inferiors. What is the difference in the shares?' To answer this question (Rhind Problem 40), the author provided tabular calculations which show that he was really asking for an arithmetic progression of shares for

the five men, each one $^1/_7$ smaller than the next. The answer is correctly found: 38⅓, $29^1/_6$, 20, 10⅔ + $^1/_6$ and 1⅓. The difference between any two is $9^1/_6$.[21]

Documents about rations create a problem that tells us that we are dealing not just with a pragmatic earthy business of feeding people, but with an economic system of more ambitious scope having a greater notional or abstract content than at first sight seems to be the case.

If a basic minimum daily ration consisted of ten loaves, a senior official could be credited with anything up to 500 per day. This would have exceeded the most gargantuan of appetites. Was the extra to support his staff? Some texts make separate reference to staff payments and so help to rule this out. In any case, some of the ration lists relate to expeditions sent to mines and quarries in uncomfortable desert locations, such as Sinai and the Wadi Hammamat. These were hardly suited to taking along one's family or household, or to bouts of high living. But then there are the fractions to consider. The Rhind Mathematical Papyrus is not alone in considering awkward fractions of loaves and jugs of beer. The same occur in real lists. Equally arresting is the accounting system of a provincial Middle Kingdom temple, that of the god Wepwawet at Asyut.[22] Some staff were paid according to the number of 'temple days' allotted to them. A text explains:

> As for a temple day, it is $^1/_{360}$ part of a year. Now, you shall divide everything that enters this temple – bread, beer and meat – by way of the daily rate. That is, it is going to be $^1/_{360}$ of the bread, of the beer, and of everything that enters this temple for (any) one of these temple days which I have given you.

Each staff member was entitled to two temple days, except for the most senior of them, who received four. The real entitlement was thus $^2/_{360}$ (or $^4/_{360}$ in the case of their chief) of every loaf and jug of beer that the temple received by way of its income. Part of the income was meat. The archive of another temple (at Kahun) deals with fractions of cattle.[23]

Commonsense tells us that we are not dealing with a system that distributed breadcrumbs and minced meat in finely weighed portions, and piled up uneaten surpluses around high officials. The system must have combined a distribution of real and of notional rations, the latter being, in effect, credit, in which a 'paper' accumulation of

undistributed ration allocation was exchangeable for something else. The loaves and the jugs were measures of value, or units of account, as much as they stood for actual amounts of foodstuff in hand, waiting to be carried off and consumed. The *pesu*-system allowed the interchangeability of bread and beer to be calculated, as well as the keeping of a record of just how much wheat or barley lay behind them. The implication, however, is that a wider range of equivalents in value would have been needed, where, for example, the grain or bread equivalent of linen cloth was expressed. But it is here that the documentation runs out. Neither the Rhind Mathematical Papyrus nor administrative documents cover such a wider field of value exchanges. For the New Kingdom we have ample records of village barter transactions which display a broad range of values of commodities expressed in terms of *hekat*s of grain or weights of metal (mostly bronze; see Chapter 7). A feeling for relative values seems from this material to have been part of the basic mental equipment for living that Egyptians possessed from an early age. But at an official level the gap in the texts remains. Either we are missing some key element in the system, or the 'cashing' or redeeming of one's accumulated surplus of rations was done unofficially, by barter and out of the scope of normal record keeping.

The lack of standardized bread and beer strengths lets us down in another respect. We cannot jump immediately to the actual figures for the average wheat and barley allocations which lay behind the basic ration, and so answer the question: how much cereal did the ancient Egyptians normally consume? How nutritious was the diet of those who dragged stones from quarries to pyramids? For convenience rations were normally expressed in simple numerical form, leaving it to the *pesu* system and the wooden tallies to satisfy any doubts or queries. There must, nevertheless, have been an average quantity that we can attempt to establish, or perhaps more realistically we can aim to set maximum and minimum figures.

It is possible to use the short inscriptions carved into the Uronarti tallies as a source. They are, unfortunately, cryptic and any results therefore somewhat tentative. One study leads to the figure of two-thirds of a *hekat* of barley and one *hekat* of wheat per soldier as a ten-day ration.[24] How feasible is this in reality? Modern estimates of the size of the Egyptian *hekat* vary slightly. One reasonably reliable figure is 4.78l. One *hekat* of wheat is thus 0.00478 cu^2. A cubic metre of wheat is reckoned to weigh 790 kg. One *hekat* of wheat should thus weigh around 3.78 kg. An equivalent amount of barley is reckoned to

be lighter: 600 kg per cu^2. Thus, one *hekat* of barley should weigh around 2.87 kg, and two-thirds of a *hekat* 1.9 kg. When added together, 5.68 (let us say 6) kg of grain per ten-day period is involved, or 0.6 kg per day. By the standards calculated for the Roman world this seems a somewhat meagre portion. According to another scholar, figures given by Polybius, writing around 140 BC, imply for an infantryman, whether legionary or auxiliary, 0.94 kg of grain per day, although Roman records from Pselchis (modern Dakka in Nubia) can be interpreted to produce the smaller figure of 0.80 kg.[25] For both Egyptian and Roman societies there is another unknown factor: the amount and variety of dietary supplement to a grain ration. In the case of Egypt this was probably fairly small. The impression derived from many sources is that bread and beer from wheat and barley formed the staple diet.

The discussion can be taken at least one stage further by estimating caloric values. One *hekat* of wheat represents about 12,474 calories (330 per 100 g) and of barley about 10,160 (354 per 100 g). One *hekat* of wheat and two-thirds of a *hekat* of barley thus would yield 19,247 calories for the ten-day period, or 1925 per day. How realistic is this figure? A report on prison diet in Egypt published in 1917 gave the following energy values required in daily diets: 1,800 calories for subsistence, 2,200 for no work, 2,800 for light labour, and 3,200 for hard labour.[26] These figures derived from the regime laid down for prisoners in the Egyptian army. (They should be compared with modern medical opinion that, for men and women between 19 and 30 following a sedentary life, 2,400–600 calories are recommended for men, 1,800–2,000 for women; for those with an active life, the figures rise to 3,000 and 2,400 respectively.) We may thus take, with some confidence, the figures from the Uronarti tallies as representing a minimum ration, and expect that in reality more was consumed by each man. If the tallies stand only for actual loaves we have to add the grain content of the separately issued beer and this may have brought the overall level into line with bodily requirements. But we should still accept that the pyramids were built on a modest but adequate health-food diet.

Apart from a general interest in ancient diet this discussion also serves a more specific archaeological enquiry concerning the capacities of ancient granaries and the number of people dependent on them that will surface in the next chapter.

Cereal administration was not confined to human foodstuff. The obliging Rhind Mathematical Papyrus (Problem 82b) includes the

following:

Amount of what a fatted goose eats:
ten geese 1¼ *hekat*s (of flour made into bread)
in ten days 12½
in 40 days 50 *hekat*s
which represents grain in double-*hekat*s: 23½ + ¼ + ⅛ *hekat*s, and 4¼ + $^{1}/_{6}$ *ro*
(1 *ro* = $^{1}/_{320}$ *hekat*).[27]

The essence of this problem, somewhat cryptically laid out, is to calculate the volume difference between grain and flour. For this a tenth of two-thirds is subtracted – presumably a rule-of-thumb ratio – and the result halved to reduce it to double-*hekat*s. The answer is not quite correct, although the scribe has aimed at great exactitude by using fractions of *hekat*s.

Management and labour (and did slaves build the pyramids?)

A similarly intense scrutiny was applied to building projects, another major goal of administration. All concerned, whether officials and architects in charge, or the army of workers and craftsmen, became part of a system in which their work and their rewards were measured and scrutinized. A typical task was the precise measurement of materials to be moved and used, whether cut blocks of stone, sun-dried mud bricks, straw and earth for making bricks, rubble or sand. A conscientious scribe would measure (or write down the measurements called out by another) in the full standardized notation of Egyptian linear measure: cubits (523 mm), palms, fingerbreadths and fractions thereof, as well as in halves, thirds and quarters of a cubit. He would then calculate the volume of material. The multiplication of fractions and subdivisions of a cubit involved considerable calculating skill, and the scribe may have referred to ready-made tables. From the volume, he could calculate the number of labour units that would be required, using standard ratios. In one example the daily labour norm for one man was to transport 10 cubic cubits. From these figures, the scribe could estimate the rations that would be required and produce work figures that could later be compared with the actual work done (an example of the last stage might be present in the markings in Figure 4.7, p. 185). It has been pointed out that this reveals a disciplined approach towards the value of a working person's time that is more

familiar in modern societies imbued with a positive work ethic.[28] In this way the supply of the three essentials for major building projects – materials, labour and rations – could be constantly monitored. It was the scribe's pen as much as the overseer's lash or the engineer's ingenuity that built the pyramids.

Who did build the pyramids? Modern answers vary between slaves and seasonally employed labourers who perhaps felt a sense of fulfilment in participating in a national task. The subject of slavery remains emotional. The recent historical experience of Black slavery in the Americas still causes outrage, and hidden forms of what is said to be slavery are from time to time identified around the world, amongst those employed in 'sweat shops', for example. Because overt slavery has been officially abolished it is easily condemned. Yet people tend not to see military conscription (otherwise known as national service or the draft) in the same light, even though it is marked by loss of liberty backed up by extreme punishments, by frequently harsh conditions, by separation from family and by only token payments. Slavery and conscription can be said to rest upon different concepts, upon outright ownership of the person as a piece of property in the former case, as distinct from a temporary claim to total service by the state. Something of this distinction was present in ancient Egyptian terminology.[29] If we keep to the niceties of legal language then we must admit in the Egyptian case a lack of evidence that the large labour force for pyramid building consisted of people who were owned as pieces of property by the king and to whom a term translatable as 'slave' was applied. As actual experience, however, the two categories – of slavery and conscription – overlap. When we speak of slave labour camps in modern oppressive regimes, populated by citizens deprived indefinitely of their normal freedoms by the state and often worked to death, we are unlikely to be troubled by the thought that we are using the term 'slave' loosely. We know what we mean. Conversely, if we say that the pyramids were built by people doing national service it does not seem nearly as bad as if we say that they were built by slaves. What we really want to know is whether the conditions of service were a lot harsher than those of life at home, and whether they were largely resented.

Over the years a clearer understanding has grown of the particular system that the Egyptians developed for mustering and deploying labour for large projects.[30] It was based upon the sense of obligation to others higher in the chain of authority (the king at the top) that was instilled in an individual from birth, together with a liking for

organizing people into groups each of which was given a name and thus a sense of identity and a basis for bonding. Prominent amongst these groups was the phyle, the same unit used in the organization of temple staff. They took their names from the positions which groups of sailors would occupy when forming the crew of a boat, thus 'starboard', 'port', 'bow', 'stern' and one of uncertain translation. There were both larger and smaller units of organization. The former used the word for a full boat's 'crew'. The names of some of them (such as 'Friends of Khufu') occur daubed in red paint on cut blocks of stone used, for example, in the construction of the pyramids at Giza and on the blocks used to seal the underground storerooms at the Wadi el-Jarf seasonal port on the Red Sea coast (see below). The smaller units, possibly of ten men, took names such as 'strong', 'first', 'noble' and 'rising'. The system (or at least the way it expressed itself in writing) developed over time. After the Fourth Dynasty and the building of the Giza pyramids the crews tended to take their names from those of prominent people, not only high officials but king's wives and daughters. Detailed studies have concluded that such crews belonged to these named individuals who were thus donating labour that was under their control to the projects of others. To what extent these crews returned after each assignment to a life based in their own homes, perhaps cultivating their own fields, is not known.

Whilst on duty they came under scribal control. In the Middle Kingdom, as stone blocks made their way from the quarry to the current pyramid site, scribes wrote labels on individual blocks within a particular consignment to help them keep a check on the progress of the whole convoy. 'Delivered to the ramp by the overseer of work, Mek' is an example, presumably written as Mek signed off his responsibility.[31] These labels incidentally inform us of the places that were supplying the labour for the crews. They include private estates and households of officials, the temple of Ptah at Memphis, a pyramid town, and many local administrative districts primarily in the area around Memphis, parts of the delta and Middle Egypt. One has the impression that a large part of Egypt's population will have lived knowing that their names were written on lists controlled by rich landowners and senior officials (the two categories largely overlapping) who, as part of their own dependence on the king, from time to time were required to summon them (via their scribes and other dependants) and send them off to work on someone else's (normally a royal) project.

The first step in the process appears to be illustrated in papyri from

the Upper Egyptian site of Gebelein and dated to the Fourth Dynasty.[32] They list persons – to a total of some 300 and from two settlements – by occupation: bakers, brewers, craftsmen, boat makers, sailors, metal-workers, grain measurers, hunters and so on, together with wives, children and parents. One of the papyri also lists persons with a title that appears to designate serviceable young men (*neferu*). Having a literal meaning approximating to 'beauties', one possible English translation is 'lads'; *shabáb* is an equivalent in colloquial Arabic.

As for what such people could find themselves doing, in 2013 part of a papyrus archive was found at the site of an ancient port on the Gulf of Suez portion of the Red Sea coast, Wadi el-Jarf, opposite Sinai. It is dated to the twenty-seventh year of the reign of Khufu, the highest known of his reign (*c*. 2447 BC).[33] It does not, however, deal with the affairs of this remote outpost. One group of fragments has the familiar form of tables which list daily or monthly deliveries of food from various areas including the Nile delta and clearly intended for a destination that is within the Nile valley. Another group of fragments comes from a logbook also in tabular form that records daily activities of a team of around 200 workmen led by a Memphite official, the inspector Merer. Its entries cover several months. Many of them relate to the construction of the Great Pyramid at Giza and to work at the limestone quarries at Tura, across the river, and to the transportation of stone blocks to the pyramid construction site using the Nile and connected canals. Whilst in transit the work teams stopped at an administrative centre which was under the authority of Ankh-haf, half-brother of Khufu and also vizier and 'chief of all the works of the king'. The archive, one might suppose, belonged to the working papers of an official (Merer himself perhaps) who had been despatched from his usual duties in the pyramid area to lead an expedition to the Red Sea coast, presumably to make the short sea crossing to Sinai to obtain copper from the local mines. When he and his team returned to Giza a sheaf of papyrus documents was left behind, wedged between large stone blocks used to close cave-like galleries used for long-term storage between expeditions. The archive illustrates the utility of the crew system, providing a group of men used to working together and probably from the same neighbourhood. Under temporary centralized control it could be ordered to undertake any of several tasks, at the pyramid building site itself or on a remote procurement assignment.

As for the numbers of people who were managed on large projects

we can turn to quarrying and mining records. In the thirty-eighth regnal year of King Senusret I, an expedition went to the quarries in the Wadi Hammamat. It was under the leadership of a 'herald' called Ameny.[34] Under him were 80 officials, roughly 18,660 skilled and unskilled workers (who included 30 hunters and a contingent of soldiers), plus a train of millers, brewers and bakers (20 of each). Amongst the officials were 20 'mayors' of towns, presumably because it was their responsibility to supply most of the crews through networks of obligation which they controlled. Interestingly the whole enterprise was looked after by only eight scribes. A modern engineering estimate for the numbers who might have been needed for building the Great Pyramid at Giza has produced a similar figure: a maximum of 10,000, to whom should be added the labour for ramp construction, procurement of materials and other kinds of logistical support. Other estimates are lower and higher, the largest being 36,000 for the Great Pyramid.[35] Even the highest of these figures will have represented less than 4 per cent of the estimated total population of Egypt at the time of pyramid construction. When seen in this light, even the building of the Giza pyramids represents a level of conscription, organized on a basis of group obligation to local patrons, that could have been easily borne.

One aspect of the labour force that would influence our views of pyramid building could we but know it is its age profile. The Gebelein lists of people apparently being enrolled for work, mentioned above, included a group of 'young men' (*neferu*). But how young? Chapter 8 (pp. 374–5) cites evidence that the building of Akhenaten's city of Amarna could have involved the extensive use of child labour. The evidence comes from the fact that many of them expired whilst still young and were then buried in a cemetery which has now been located and partially excavated. But if they had survived to a more normal adult age we would not know of their early recruitment. More on this subject will be said in Chapter 8. For now, the possibility of child labour should be held in mind when considering any major construction project from ancient Egypt.

Obligation is not an absolute feeling. In any human group, there will be some who do not like being told what to do, although their resistance beneath a dominance hierarchy is more likely to be indirect and passive – the weapon of the weak – than to take the form of outright disobedience. The idea of rejecting imposed labour is expressed in a text which we first encounter perhaps a century after the end of the Old Kingdom. At this time, a set of protective spells

became available to those who could afford to have them painted on their coffins (hence the modern term 'Coffin Texts'). One of them was unambiguously intended to enable a substitute statuette (called a *ushabti*) 'to carry out work for their owner in the realm of the dead'.

> If N be detailed for the removal(?) of a block(?) to strange sites(?) of the desert plateau, to register the riparian lands, or to turn over new fields for the reigning king, 'Here am I' shall you say to any messenger who may come for N when taking his ease(?).[36]

The text and, as they later developed, the specially made statuettes proved to have enduring value and became a distinctive feature of the ideas and practices surrounding death. Fear of conscription, it seems, could pursue a person even of high rank beyond death. There is no mistaking the psychology of unwillingness, the sense of the inner self seeking to avoid, by a trick, sudden demands for labour which cannot be challenged. Perhaps 'trick' is too strong a word since the sending of 'substitutes' (primarily relatives) to fill the place of a conscripted person is documented from real-life situations.[37]

Those in service were 'paid', in that the supply of rations was part of the system, so they did not have their labour taken from them for nothing. But the postings were typically arduous. Some did try to escape, and then the state revealed its punitive side. A document from the late Middle Kingdom, a prison register, opens for us a little window on the fate of those who chose not to co-operate.[38] One typical entry reads:

> The daughter of Sa-anhur, Teti, under the scribe of the fields of the city of This: a woman. An order was issued to the central labour camp in year 31, 3rd month of summer, day 9, to release her family from the courts, and at the same time to execute against her the law pertaining to one who runs away without performing his service. Present [check mark]. Statement by the scribe of the vizier, Deduamun: 'Carried out; case closed'.

This sounds very much as though her family had been held hostage until her arrest.

It is possible for an authority to order its people to do such-and-such a task and leave them to get on with it as best they can. Faced with incentives or punishments people can organize themselves quite effectively (in the New Kingdom, much of the city of Amarna was

probably built in this way; see p. 333). Once you decide to take control of every detail of the operation, however, the burden of administration rapidly mounts and in the modern world easily gets out of hand. 'Less government' has become a modern political rallying cry. The Egyptians, with clear (if ambitious) goals and no dissenting philosophies to divert their energies, got away with it. In part they did so also because the systems which kings and scribes used were more limited than at first sight appears to be the case. The friction or drag inherent within the systems of pre-modern societies can with hindsight appear as something of a blessing.

Bureaucracy is an attitude of mind, an aptitude that we encounter with most immediacy in original documents. It can easily appear to be a cosy self-contained world of order, particularly as the documents tend to be studied in isolation by experts in ancient language working in quiet studies or libraries and equipped with dictionaries and manuals of grammar. For the ancient scribe, however, the order belonged to his inner mental world. When he rested his pen and looked up from his sheet of papyrus the scenes that met his eyes may well have been a good deal less orderly. Indeed, the essence of the act of writing (and of drawing) is to reduce a complex and often chaotic reality to a comprehensible order.

Ancient documents lie at an interface of reality: the far side is available to us only through archaeology. This has already intruded in the description of baking and brewing. These messy and smoky processes were the reality behind the precisions of the Rhind Mathematical Papyrus. We can move even closer by examining a find of well-preserved bakeries in a large establishment connected to the pyramids at Giza.[39] Figure 4.6 is a plan of one sample room, measuring roughly 5 × 2.5 m. The free working space, however, is much less, around 1 m in width. The left side (as one entered) was given over to preparation, with dough-mixing vats at the back. Current understanding of the Old Kingdom baking process (somewhat different to that of the Middle Kingdom, as illustrated in Figure 4.4, p. 174) sees the heavy bread moulds used in pairs: the lower one containing the dough which will bake to become a heavy conical loaf, the upper one, heated separately in a stack on an open hearth, creating a miniature oven when inverted over the lower one. Just inside the door on the right stood a low hearth, presumably the place where the upper moulds were stacked for heating. Along the rest of the right side of the room ran two parallel rows of circular depressions where (there seems no reason to doubt) the paired moulds (now

miniature ovens) had stood, able to produce just over 20 large loaves. The whole room, when first found, was buried in fine wood ash that reached the rim of the vats and to avoid which the bakers had built the hearth higher and higher. The accounting system, however, removed from the scribes the need to enter these dirty crowded places. All they needed to do was to stand outside and count the sacks of flour going in and the numbers of loaves being carried out. Figure 4.6 also illustrates an abiding characteristic of most archaeology, made more pointed by being associated with the Giza necropolis, home to the only surviving 'wonder' of the most popular list of seven compiled in classical times, and the source for some of the finest and most sensitively carved statuary ever produced in Egypt. That characteristic is the utter lack of grandeur in the living and working conditions of most people of the past.

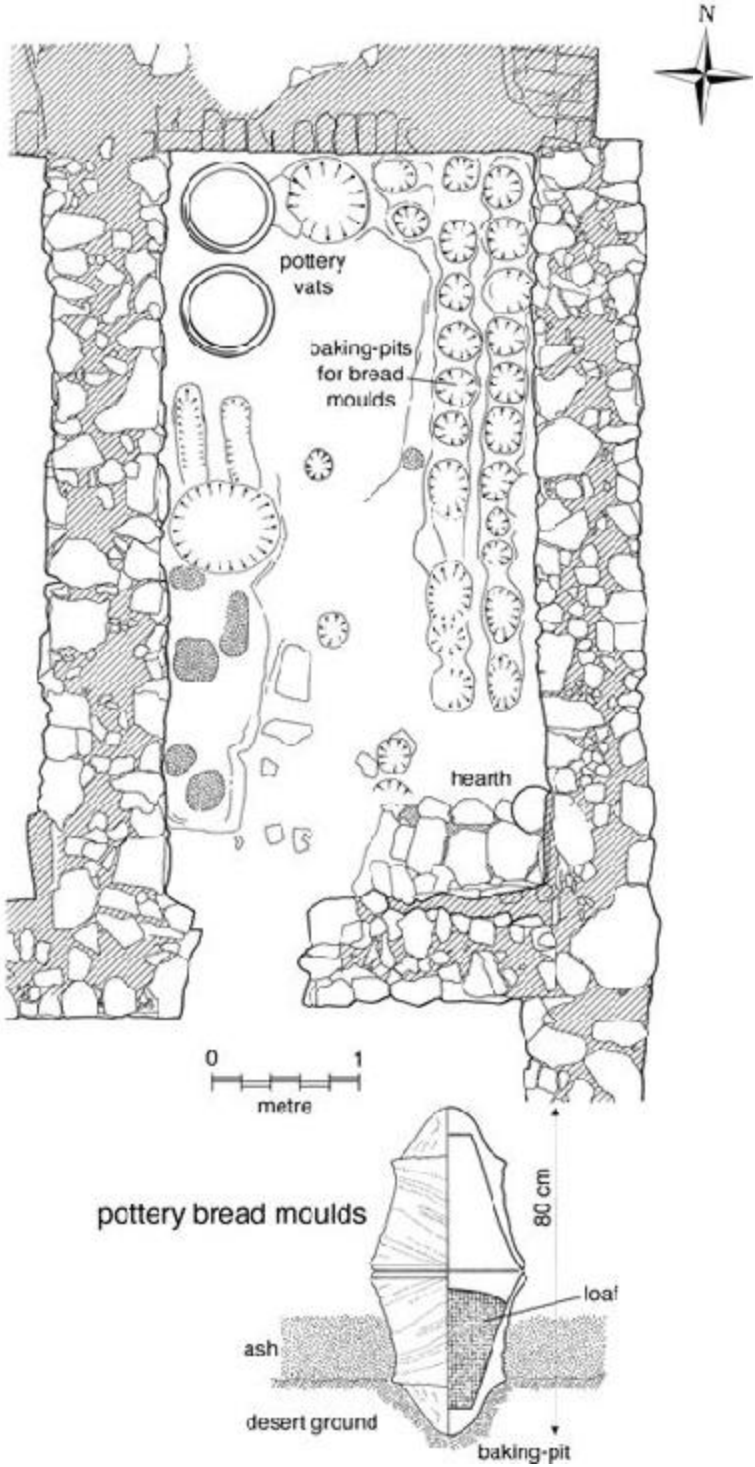


*Figure 4.6*A bakery from the Heit el-Ghurab workers' town of the Fourth Dynasty at Giza. After M. Lehner, The Oriental Institute (Chicago), *News and Notes* 135 (Fall

1992), 8–9, Fig. 8. Shown as an inset is a reconstruction of how the bread moulds were used, the upper mould, preheated, creating a temporary oven. The moulds are after *Aeragram* (Newsletter of the Ancient Egypt Research Associates) 3, no. 1 (1999), 12–13. The position of this bakery within the town is given in Figure 4.9, p. 190, labelled 'B'.

The best extant examples of scribes reaching out their hands to the rough surfaces of manual labour are to be found in some of the ancient quarries. Egyptian temples and quarries show that quarrymen and builders worked with blocks of stone that were generally of comparable sizes but, that said, still varied noticeably. Masons on building sites expended considerable effort to achieve close fits of blocks that were almost but not quite of the same size. Scribes wanted to know the rate at which stone was being extracted from the quarry. Since the blocks varied in size, the simple procedure of counting them would not do. Instead they could, as one option, mark the progress of each day or other work period by means of an annotated red line daubed along the final line of chisel cuts on a quarry face, or on the ceiling if the quarry were underground.[40] This subsequently became the baseline against which to measure the rate of progress for the next period. When, say, a granite obelisk was needed, particularly close attention could be paid to monitoring the progress of the workmen. In one quarry at Aswan the fruits of their daily poundings of the granite with large balls of the hard stone dolerite were marked in paint, perhaps to ensure that no man received his rations or left the work until he had fulfilled his quota (Figure 4.7).[41]

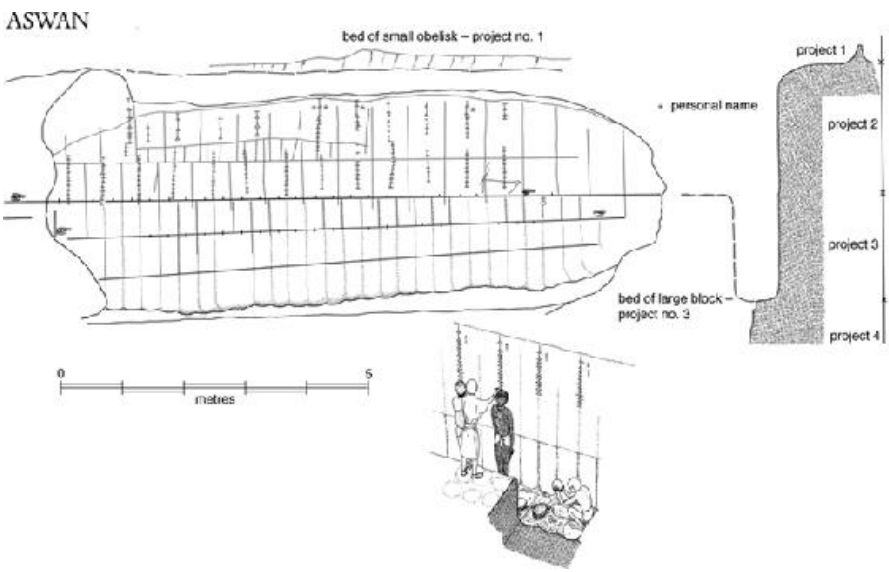


Figure 4.7 Working practices recorded in red-and-black painted lines on the face of a

granite quarry at Aswan, probably New Kingdom. The red lines are here rendered in grey. In two previous projects large granite blocks had been removed. The new project began with the cutting of a trench to separate the intended block from the parent rock, the vertically scalloped appearance preserving the method of removing the unwanted stone, by concentrated pounding with globular balls of hard stone (dolerite). The rock face left over from the previous project was smoothed so that it could be used to record the progress of the workmen, by means of vertical columns of red triangular marks, corresponding to each man's work position (a pair of the pounding scallops). Many of the intervals are about 7 cms in depth. Is this the amount of stone removed in one day? The variations between the lowest of the marks and the bottom of the trench suggest that progress was marked by the head height of each man (the last day probably going unrecorded). The record at the top suggests that some of the preliminary work was recorded every two working periods (days?) for an unknown reason. Originally the name of each man seems to have been written beside each column of marks (the approximate position of the few that survived are marked by asterisks). Perhaps the payment of rations was dependent upon the removal of a certain amount of stone. The long straight vertical lines helped to keep the workmen evenly spaced. The long horizontal lines are probably part of a survey connected with the fashioning of the block to be removed. If this is a correct interpretation this piece of quarry face would represent the work of around 15 men cutting the trench in under 20 days. After Engelbach, *Obelisk*, Pl. VI.

Building the pyramids

The Giza pyramids are only part of a gigantic archaeological site mostly of one period (the Fourth Dynasty) which has remained remarkably well preserved. It includes fields of tombs of royal relatives, high officials and others, and extensive remains of houses, storerooms, administrative buildings and structures that represent facilities of various and sometimes uncertain purpose. The various parts, including the pyramids themselves, are the outcome of a huge management operation in which several interlocking lines of administration had to be pursued simultaneously, with the danger that a mistake in one could disrupt others and delay the whole gigantic project. To be successful this required a total managerial overview, the scope of which we can reconstruct using archaeological as well as written evidence from the site (Figure 4.8).[42]

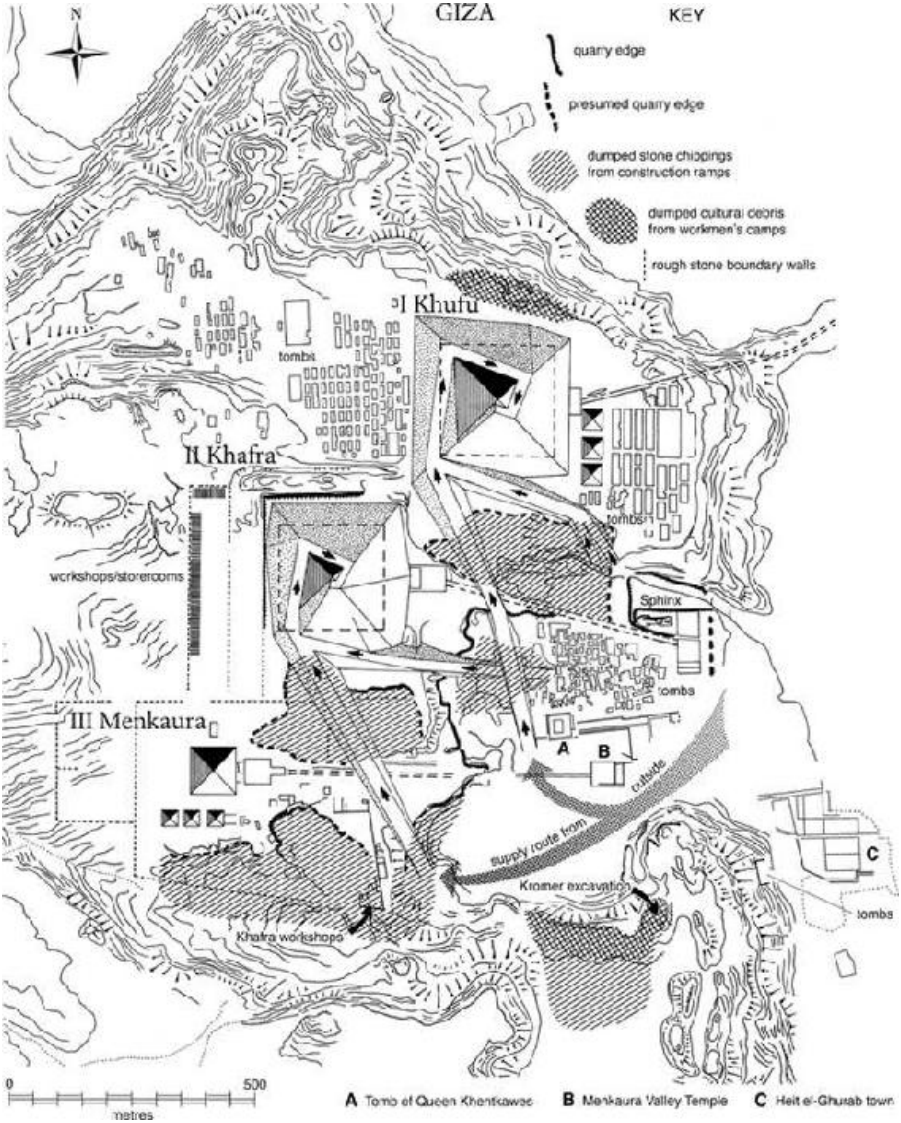


*Figure 4.8*The archaeology of large-scale public works: the Giza pyramid plateau, showing quarries and construction debris, plus the hypothetical outlines of the partly 'spiral' construction ramps for the first and second pyramids, those of Khufu and Khafra, respectively. For the Khentkawes/Menkaura Valley Temple area see Figure 5.7 (p. 208); for the Heit el-Ghurab town see Figure 4.9 (p. 190). After M. Lehner, *AfO* 32 (1985), 136–58; Lehner and Hawass, *Giza* 365, Fig. 15.12.

The desert plateau on which all this happened was not a blank page on which the architects had a free hand to design and to lay out the buildings of their choice. One basic constraint was provided by the site's geology. Much of the surface of the plateau is the top of a bed of limestone (the Moqatam Formation) that has a general slope down to the south-east. It seems to have been the desire of the pyramid

builders to keep to more or less the same level for each of the three major pyramids (of kings Khufu, Khafra and Menkaura), and this could be met only by laying them out along a single line which is perpendicular to the direction of the slope and at the same time at an angle to the north–south trend of the River Nile. The limestone of the Moqatam Formation was also suited to providing much of the stone for the cores of the pyramids, although it was not fine enough for the outer casings. For each pyramid a convenient adjacent quarry was opened.

Convenience involved another major consideration. As the pyramid rose so the stones had to be taken to ever higher levels. Although opinions differ as to the details there is general agreement that much of the stone was raised by dragging it, loaded on to wooden sledges, up huge ramps that had to be raised in phase with the construction work. Keeping the gradient to a minimum as well as minimizing its distance from the quarry was a further consideration of prime importance. Furthermore, the builders of the second and third pyramids had their limits of manoeuvre reduced by the works of their predecessors. Khufu had chosen an area at the far north-eastern end of the Moqatam Formation, immediately above a high escarpment, drawing stone from quarries on the south side, and filling up the ground to east and west with tombs for members of his court. His successors were obliged to move further to the south-west, so that no one was able to use the advantage of the natural slope of the ground by constructing their ramps down its line. All the ramps to some extent must have run up the slope. There was probably, however, a good reason for preferring this arrangement of ramps. Not all of the stone was quarried locally. Originally the pyramids were encased in a layer of fine limestone from quarries across the river, at Tura, supplemented in the cases of the pyramids of Khafra and Menkaura with granite from Aswan. The temples that accompanied the pyramids also required stone from outside, and there must have been, as well, a considerable demand for timber, which was, amongst other uses, laid across the tops of the ramps to provide a suitable surface for the sledges. Transport of heavy materials to the site must have been by boats on a canal or canals, broadening into harbours especially at the time of inundation, requiring docking areas. The natural site for this is towards the south of the site, where the dip of the plateau leaves a depression. If the zone for receiving deliveries of building materials and preparing them for their places on the site was here, the alignments of the construction ramps would need to take this into

consideration as well. Site management employing the skills of co-ordination and anticipation was thus the real pinnacle of command in pyramid building, and it is not surprising to find that the task was performed by the most senior figures in the land, close to the king, to the extent of being, in the Fourth Dynasty, normally a son of a king (one such was Ankh-haf, Khufu's half-brother, whom we have met in the Wadi el-Jarf papyri, above).

The picture of managerial choices and constraints arises from two sources. One consists of direct observations. The locations of several of the quarries are apparent from modern excavations, and certain pieces of evidence point to the existence of an ancient basin towards the south end of the site. The other is the result of putting oneself in the position of the builders and looking for an economical solution within the framework provided by the archaeology. The alignments of the ramps, huge constructions in their own right, can be deduced only in this way since when the pyramids were finished the ramps were cleared away, leaving few direct traces. The need for clear forward thinking and the demarcation of zones of activity to prevent them from spreading too far may have been one reason behind a pattern of rough stone walls which divides the Giza plateau in the areas of the pyramids of Khafra and Menkaura into large zones. They were left as permanent features and, with some additions, would have continued to define the ground that properly belonged to each pyramid.

The construction ramps were major projects in themselves. Each one may have equalled two-thirds of the volume of its pyramid. At the end of the day they had to be disposed of. What were the ramps made of? Some later sources show that ramps could be built up from compartments constructed of mud brick and filled with sand. There is no sign at Giza, however, of huge dumps of mud brick. Instead several parts of the Giza plateau, especially the quarries and the low area to the south, were buried in stone chippings and dust, in vast quantities sufficient probably to account for the ramps. This provides another managerial responsibility: directing the quarrying and the necessary extra labour to put quarry debris and loose desert materials into the right position to create the appropriately graded ramp for the stage of pyramid construction reached, the ramp being a long and broadly based heap of loose material.

The pyramids, their temples and associated private tombs were built to last forever and have remained a well-preserved field of monumental ruins. Over the years, however, the focus of productive archaeology has shifted from the monumental to the remains of

buildings which were erected at the same time but never intended to be part of the permanent landscape. As with the long walls which subdivided the Giza plateau, a common building material was rough stone and mud mortar, although in some places mud bricks were preferred. Certain of these constructions were built close to the pyramid sites themselves.

The simplest in form is a block of parallel units which lies to the west of the pyramid of Khafra, built against the western enclosure wall of this pyramid. A set of 75 galleries arranged like the teeth of a comb, each about 3 m wide and some 30 m long, extends towards the pyramid; a further set of 19 lies at right angles. The galleries were largely cleaned out in antiquity, but such remains as have been discovered inside point to them having been workshops (for statuary amongst other crafts) rather than places of accommodation or 'barracks' for workers, as had originally been proposed. To the south-east of the pyramid of Menkaura (Figure 4.8, 'Khafra workshops') lay another site connected with pyramid building: a collection of small buildings, some of them for accommodation, on either side of a rubble wall that makes a series of sharp changes of direction. The full extent of the site is not known, for it continues unexcavated beneath the desert on both east and west. Across an open area were scattered a large number of rough blocks of alabaster, together with an unfinished alabaster column base. These help to identify this part of the camp as a masons' workshop. The site was relatively well preserved when found, because it had been buried beneath a vast dump of the stone chippings that occur in various parts of the Giza plateau. The late appearance of this dump – after the camp had been abandoned – is understandable if we see it as the remains of a pyramid construction ramp, removed after the end of building and dumped in the nearest convenient place.

Not all of the ancient dumps at Giza are of limestone chippings and archaeologically sterile, however. East and south of the Menkaura work-camp lies a large bay in the line of the rock escarpment largely filled up. Although at first sight the filling appears to be natural, archaeological soundings have suggested otherwise. Flinders Petrie was the first to note that this was no natural patch of desert: 'The whole surface is covered for many feet deep with broken stone-chips from quarrying.'[43] Between 1971 and 1975 archaeologists extensively probed the eastern edge, where it becomes the western slope of the prominent rock outcrop south of the Menkaura Valley Temple (marked as 'Kromer excavation' in Figure 4.8).[44] A substantial layered

deposit of Old Kingdom domestic rubbish was revealed, which included pottery and other artefacts, but no structures. These two probings, and the record of the Menkaura work-camp, are pointers to the possibility that the whole southern edge of the Giza plateau, which is its lowest part, is the site of a gigantic rubbish infilling consisting in part of ramp debris and in part of the dumped remains of building sites and work-camps that had been cleared away (so adding to our list of tasks that confronted the pyramid builders).

These remains lie interspersed amongst the pyramids themselves, particularly towards their southern limit. They do not, however, represent the place where the bulk of the workforce lived and was looked after. This – a large town of which only a part (not necessarily the largest) has been exposed by excavation – lay below the conspicuous rocky outcrop which defines the southern edge of the pyramid zone and thus also to the south of the low-lying area where harbours were situated. In order to separate it from the pyramid landscape, a massive wall of stone blocks, over 10 m thick, was constructed, joining the northern edge of the town to the steep desert escarpment to the west although leaving a tunnel-like doorway running through it. Although it could not have prevented people from entering or leaving the pyramid plateau, it presumably served as a mustering and checkpoint for the daily comings and goings of those with tasks to perform there, its scale symbolizing the enormity of the building project and of the authority under which everyone laboured. Its modern name, Heit el-Ghurab (Wall of the Crow), is now used as a convenient name for the ancient town itself. The extensive areas of building that have been revealed by excavation belong primarily to the reigns of Khafra and Menkaura. Deeper soundings, however, have shown that at least parts of the town had replaced an earlier period of building which one would expect to have been of the reign of Khufu.

As so far revealed, the plan of the town shows two different faces (Figure 4.9).[45] One of them (represented by the Western Town and the Eastern Town) is an extensive spread of interlocking small buildings which looks like a product of self-organization although following a broad similarity of north–south alignment. For access it relied upon narrow paths that constantly changed angle rather than on a predetermined grid of streets. From the plans, it is often hard to distinguish clusters of rooms that could compose a 'house' or other unit of common purpose. One exception, which separates the Western from the Eastern Town, has been given the name Royal Administrative Building. The excavated part included a courtyard lined with circular

grain silos. Amongst the material culture found were mud sealings from official acts of administration and what appear to be small mud tokens representing food rations. Mud sealings, from papyrus rolls and the bindings on wooden storage chests, are sometimes found in concentrations, and one of these was not far from one of the larger houses in the Western Town, which thus emerges as a possible scribal office. The sealings bore the titles of some of the highest officials of the land, and the names of kings Khafra and Menkaura. Such material shows that this part of the site, despite its dense, informal layout, housed some of the controlling activities for the building of the pyramids.

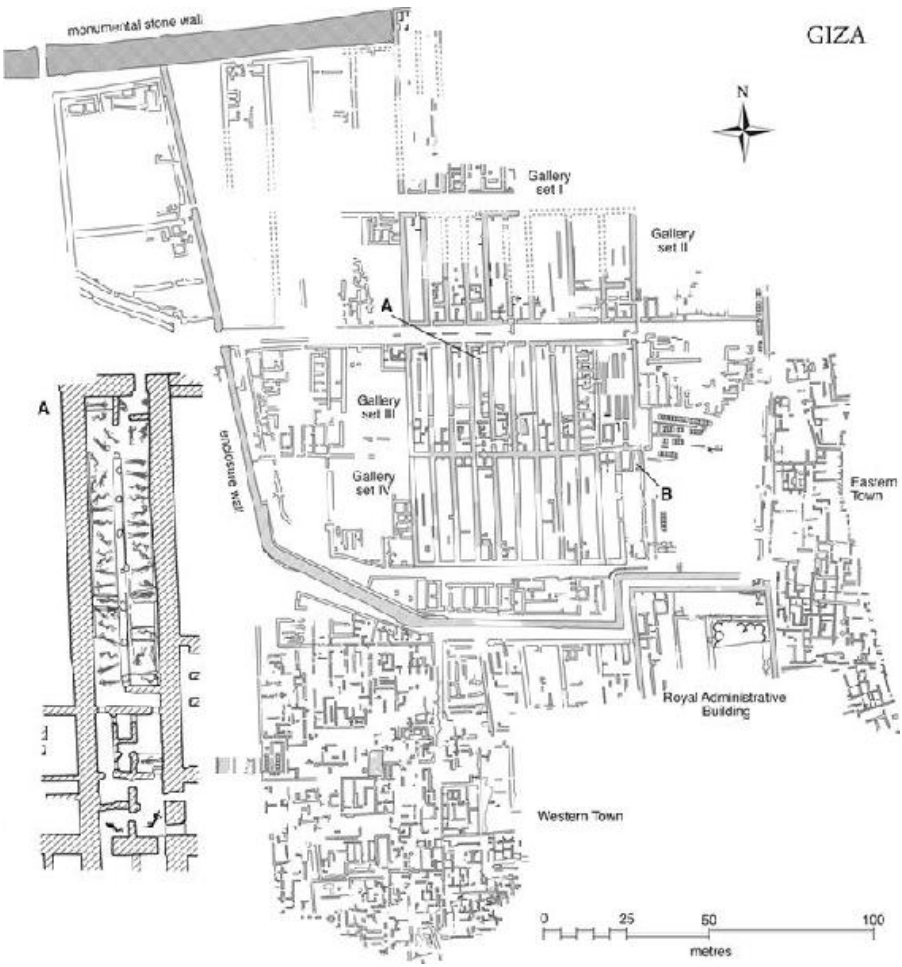


*Figure 4.9*Overall site plan of the Heit el-Ghurab worker's town at Giza. The plan has been obtained through a combination of removing surface sand to reveal the tops of walls and full excavation of selected individual parts. This difference in excavation

strategy is reflected in the limited extent of shading of the walls. One of the fully excavated long chambers (labelled 'A') is shown inset at a larger scale. The sleeping figures rendered in grey are intended to demonstrate that if this was an accommodation unit it could have housed between 40 and 50 men. The position of the bakery shown in Figure 4.6, p. 184 is also marked, as 'B'. After M. Lehner, M. Kamal and A. Tavares, *Giza Plateau Mapping Project, Season 2005, Preliminary Report*, Boston, MA, Ancient Egypt Research Associates, 2016, 8; also Lehner, 'Labor', 402, Fig. 1.

The northern part of the site, between these two districts and the great wall, has a different character. The walls are much thicker and they follow a more regular, rectilinear street plan. Covering an area of around 150 ×180 m, a sub-rectangular enclosure is largely filled with long parallel chambers or galleries, each measuring about 4.5 ×34.5 m, laid out in rows and served by straight narrow streets. The interiors of the galleries were subdivided into bewildering clusters of rooms and spaces, constantly differing in detail from one chamber to another. Groups of rooms that look like small houses tended to occupy the further end, and some had been used for the baking of bread (Figure 4.6, p. 184, is an example) and, in one example, for the working of copper. Half or more of the front part contained column bases set into a narrow mud bench running down the centre to support wooden columns for a roofed area. Scattered down the long spaces on either side of the bench were a few low platforms of mud, sloping up slightly towards the side walls. A reasonable interpretation is that they are sleeping platforms. In later periods groups of long, parallel, narrow chambers were the preferred design for the large-scale storage of grain and other commodities (Figure 6.6 and Photograph 6.2, pp. 259 and 260 supply a fine example). Here the internal features suggest otherwise and point towards domestic occupation, thus, that the block of chambers together served as a barracks. It has been experimentally demonstrated that each of the chambers could have slept 40–50 men, leading to an estimate of up to 2,000 for the whole gallery complex.

The site has yielded no written records that could identify for us how the various parts were used. But we know, from a mass of other sources, the general outline of how labour was organized for large projects. As already explained, the system relied upon the deployment of formally constituted crews of men who worked under scribal supervision. Given their own names, the crews would have had a sense of identity. Knowing that many such crews formed the core of the pyramid labour force at Giza, it is a logical step to propose that they were the occupants of these galleries. The estimated 2,000 men

would have been only a portion of the labour force that, for at least part of the year, would have been accommodated at the site. We can speculate that there are many more galleries as yet undiscovered that would boost the total. We can also draw a contrast between, on the one hand, crews in the gallery barracks, specialized and, as workmen, an elite, living a regimented communal life, and, on the other hand, a more amorphous population of support personnel, from scribes to providers of food, who occupied the extended village-like settlement that lay beside it. The town as a whole was abandoned after the pyramid building ceased. Few articles of value were left behind. But the irreducible detritus of life has proved to be a valuable source of information. Carefully collected and studied by the archaeologist it has revealed, for example, a varied diet, with a relative of abundance of meat, some of it from the hunting of wild animals (including gazelle), implying varied categories of supplier (recall that hunters were amongst the people listed in the Gebelein Papyri and the Wadi Hammamat inscription cited above).[46]

These varied constructions at Giza seem to be the product of building the pyramids. The Giza plateau, however, was also home to a second community. Its purpose was to maintain the permanent cults of the kings buried in the pyramids and of the host of people buried in the surrounding tombs. One major area of accommodation for at least a part of this community has been excavated to the east of the pyramid of Menkaura, and will be illustrated in the next chapter (see especially Figures 5.7 and 5.8, pp. 208 and 209). When added to the workers' town of Heit el-Ghurab, Giza offers us the largest exposure of Old Kingdom settlement remains we have, and so helps us to define the nature of Old Kingdom urbanism, part of the subject matter of the next chapter. From the New Kingdom onwards, the heart of any town or city or village was its shrines and temples which served the cults of kings and gods. At Giza in the Old Kingdom the only buildings which served this end were the pyramid temples and the offering-places attached to private tombs. As architecture we cannot recognize other kinds of shrine. In whatever ways the communities at Giza wished to appeal to protective gods and goddesses, it did not draw out the resources needed to create a distinctive architectural setting. Shrine-building, other than for deceased people, was a low priority for the Egyptian people as a whole at this time.

The various supplementary aspects of pyramid building, the creation and maintenance of the construction sites and then the clearing of them away, are no mean ones. From an administrative

point of view, it hardly mattered if the operation in hand involved highly skilled sculpting and engineering or the transportation of mountains of rubbish. The size of the Giza pyramids has, since ancient times, been a marvel, and people have speculated on the numbers of labourers needed and their conditions. But whilst it would be an exaggeration to say that in organizational terms the pyramids that we see are only the tip of an iceberg, we nevertheless have to recognize that administratively the actual piling up of stones into pyramidal shape was only one of several major and pressing tasks. If we had more of the ancient texts (of the kind represented by the Wadi el-Jarf papyri) they would document the devices by which the huge administrative needs were met. But even then we would be unlikely to have the full picture. Looking at the less spectacular aspects of the archaeology of Giza is essential for understanding the total scope of the necessary administration.

Writings from the Old and Middle Kingdoms are, in effect, spot samples from a much larger body of original documents most of which have not survived but from which we still have to deduce the full extent of the system. Within the period of our study, which extends back into the time before writing had been developed, it must have grown from zero. But how rapidly or slowly did it grow? One study of the history of the ancient Egyptian economy makes as its central theme that, as time passed, the writing of documents gradually extended its scope, taking in, for example, private property transfers but not until the Middle Kingdom. This opened the way for more opportunities for taxation (and control) and thus to an expansion of the controlled (or state) economy.[47] This approach presumes a degree of intentionality on the part of the administration – seeing an opportunity to increase revenue and acting upon it – which is something not to be taken for granted. And the difficulty with any idea that rests on quantification of written material from such early periods is the fortuitous nature of survival of fragile documents. We know that papyrus was being made by the time of the First Dynasty but we have to wait a long time before we have actual papyrus documents. None the less, ideas which seek a form of development in Egyptian society are to be welcomed and borne in mind as evidence increases.

Bureaucracy in the ancient world was an instrument of prosperity of a kind that has surfaced in modern economic debates, revolving around the following question: are public works entailing massive state employment a good thing? Modern debates mix economics and

ideology inextricably, and involve a degree of abstract knowledge and an ability to manipulate economies that is unique to our day. Nevertheless, even if we reject public expenditure as a modern route to prosperity, we must recognize that part of the backcloth of history is the fact that the central direction of resources committed to massive labour-intensive projects was in earlier times the great engine of growth, creating many of the world's civilizations. For the ancient Egyptians we can reconstruct the system in a quite specific way. We can see that huge numbers of people received a basic ration – a minimum wage – and a not insignificant number did better still. The number of jobs (with ration entitlement) was artificially inflated by an early work-sharing device: the phyle system, in which a person performed his duties for only a limited part of each year. The land and its farmers were obliged by the pressure of demand dictated from above to produce enough. The state had already become the great provider and it produced whatever it is that we wish to call Egyptian civilization. Welfare (as yet innocent of social ideology) arrived early in human history.

Notes

1 Both passages are in P. Chester Beatty IV; see A.H. Gardiner, *Hieratic Papyri in the British Museum. 3rd series: Chester Beatty Gift*, London, BM, 1935, 41. The first passage also occurs in P. Anastasi II and P. Sallier I; see Caminos, *Miscellanies*, 51, 317.

2 Strongly argued in M.S. Pinarello, *An Archaeological Discussion of Writing Practice: Deconstruction of the Ancient Egyptian Scribe*, London, Golden House, 2015.

3 Posener-Kriéger and de Cenival, *Abu Sir Papyri*; Posener-Kriéger, *Les archives*; Strudwick, *Texts*, 39–40, 165–72.

4 Papazian, *Domain* explores this theme in some detail, with a summary on pp. 36–7.

5 Fakhry, *Dahshur Reliefs*.

6 Papazian, *Domain* deals extensively with temple landholdings.

7 A.M. Roth, *Egyptian Phyles in the Old Kingdom: the Evolution of a System of Social Organization*, Chicago, IL, UCP, 1991. Note her thought-provoking hypothesis that phyles had originated in prehistoric times as 'totemic clans' and perhaps still retained even in the Old Kingdom something of the nature and status of a guild; also Lehner, 'Labor', 416–19, 432–9; Lehner and Hawass, *Giza*, 131–2, 357–8; A. Spalinger, *Orientalia* 82 (2013), 157–206; Muhs, *Economy*, 43. Quirke, *Exploring Religion*, 92, prefers the translation 'watch' to 'phyle'.

8 Posener-Kriéger and de Cenival, *Abu Sir Papyri*, Pl. XXXI; Posener-Kriéger, *Les archives*, 429–39.

9 On Egyptian mathematics see Imhausen, *Mathematics*. Pages 52–4 explain 'Notation of fractions'; Gillings, *Mathematics*.

10 Rhind Mathematical Papyrus Problem 42. Translated in Peet, *Rhind*, 81–2; also Robins and Shute, *Rhind*, 46.

11 Large predynastic breweries have been found at Hierakonpolis in the south and

Tell el-Farkha in the north: R. Friedman, 'Hierakonpolis.' In Teeter, *Origins*, 34–5; K.M. Ciałowicz, 'The predynastic/Early Dynastic Period at Tell el-Farkha.' In Teeter, *Origins*, 55–7.

12 D. Samuel, 'Baking and brewing.' In Nicholson and Shaw, *Materials*, 537–76.

13 Winlock, *Models*, 27–9, 88, Pls 22, 23, 64, 65.

14 Peet, *Rhind*, 112–13; Gillings, *Mathematics*, 128–36. In the New Kingdom, working out how to manage the loss of weight (between $^1/_8$ and $^1/_{10}$) that happens during the baking process was handled somewhat differently; see A. Spalinger, *BIFAO* 86 (1986), 307–52.

15 Rhind Mathematical Papyrus Problem 75. Peet, *Rhind*, 120; Robins and Shute, *Rhind*, 51.

16 But not always, e.g. Griffith, *Papyri*, 65, Pl. XXVIa; Collier and Quirke, *Papyri: Accounts*, 36–7.

17 Experimentally verified at Amarna in 1987; see P.T. Nicholson, 'Experimental determination of the purpose of a "box oven".' *AR* V, 241–52.

18 D. Dunham, *Uronarti, Shalfak, Mirgissa*, Boston, MA, MFA, 1967, 34–5, Pls XXVII and XXVIII; W.K. Simpson, *JEA* 59 (1973), 220–2; Allen, *Heqanakht*, 148. One of the tallies is illustrated in Vogel, *Fortifications*, 41.

19 D. Mueller, *JNES* 34 (1975), 249–63; A. Imhausen, *Historia Mathematica* 30 (2003), 3–16; Imhausen, *Mathematics*, 104–12.

20 Rhind Mathematical Papyrus Problem 65. Peet, *Rhind*, 65; Robins and Shute, *Rhind*, 41; Imhausen, *Mathematics*, 107–8.

21 Peet, *Rhind*; Robins and Shute, *Rhind*, 42–3; Imhausen, *Mathematics*, 106–7; L. Miatello, *Historia Mathematica* 35 (2008) 277–84.

22 A.J. Spalinger, *JAOS* 105 (1985), 7–20; Muhs, *Economy*, 83–4.

23 Griffith, *Papyri*, 45–6, Pls XVI, XVII; Collier and Quirke, *Papyri, Accounts*, 24–5.

24 W.K. Simpson, *JEA* 59 (1973), 220–2; see also B.J. Kemp, *ZÄS* 113 (1986), 120–36.

25 A.P. Gentry, *Roman Military Stone-built Granaries in Britain*, Oxford, British Archaeological Reports, 1976, 23–4.

26 Cited in B.J. Kemp, *ZÄS* 113 (1986), 120–36, p. 132; see also P. Garnsey, *Food and Society in Classical Antiquity*, Cambridge, CUP, 1999, 19–20. Park and Greenberg, *Finance*, 249–51, 254 argue that my suggested figures for diet and calorie intake are too low. They may well be right. But the results of such calculations are not necessarily the same as the amounts that people actually received. Studies of the large sample of skeletons from excavations at Amarna suggest that many of these people were poorly nourished and had experienced heavy labour. In one cemetery those who died (females as well as males) were mostly under the age of 25 and showed the same signs of inadequate nourishment and hard labour as if they had been child labourers (see pp. 374–5).

27 Peet, *Rhind*, 125; Robins and Shute, *Rhind*, 52.

28 W.K. Simpson, *Papyrus Reisner* I, Boston, MA, MFA, 1963, 83–5; *Papyrus Reisner* III, Boston, MA, MFA, 1969, 13–15. G.E. Kadish, 'Observations on time and work-discipline in ancient Egypt.' In Manuelian, *Studies* II, 439–49, discusses the rather strict work ethic that these texts reveal.

29 The most comprehensive study remains Bakir, *Slavery*; also Zingarelli, *Trade*, 99–109.

30 Lehner, 'Labor', 397–522; Eyre, 'Work in the Old Kingdom'.

31 Cited in Lehner, 'Labor', 422.

32 Cited in Lehner, 'Labor', 445, drawing on P. Posener-Kriéger, *RdÉ* 27 (1975), 211–21.

33P. Tallet and G. Marouard, 'The harbor of Khufu on the Red Sea Coast at Wadi el-Jarf, Egypt.' *Near Eastern Archaeology* 77 (2014), 4–14.
34G. Goyon, *Nouvelles inscriptions rupestres du Wadi Hammamat*, Paris, Imprimerie Nationale, 1957, 17–20, 81–5, no. 61; D. Mueller, *JNES* 34 (1975), 256; Lehner, 'Labor', 444–5. Or were the high numbers units of man-days (see the references, Lehner, 'Labor', 483, n. 460)?
35S.K. Weir, *CAJ* 6 (1996), 150–63; Lehner, 'Labor', 436, 471; Lehner and Hawass, *Giza*, 415, 419.
36Faulkner, *Coffin Texts* II, 106–7, Spell 472; H.D. Schneider, *Shabtis: an Introduction to the History of Ancient Egyptian Funerary Statuettes*, Leiden, Rijksmuseum van Oudheden, 1977, Vol. I, 54–5. The designation 'N' stands for the personal name of the owner of the coffin or statuette.
37S. Quirke, *RdÉ* 39 (1988), 83–106, esp. 87–90.
38Hayes, *Papyrus*. The quotation is from p. 64; also translated in Parkinson, *Voices*, 85, 99–101; Muhs, *Economy*, 67.
39Lehner and Hawass, *Giza*, 375–8.
40D.D. Klemm and R. Klemm, *Stones and Quarries in Ancient Egypt*, London, BM, 2008, 185; S. Nishimoto, S. Yoshimura and J. Kondo, 'Hieratic inscriptions from the quarry at Qurna: an interim report.' *British Museum Studies in Ancient Egypt and Sudan* 1 (2002), 20–31 = www.thebritishmuseum.ac.uk/egyptian/bmsaes/issue1/nishimoto.html; T. Endo, 'On the daily amount of excavation for the construction of the rock-cut tombs during the New Kingdom period of ancient Egypt.' In S. Huerta, ed., *Proceedings of the First International Congress on Construction History, Madrid, 20th–24th January 2003*, Vol. II, Madrid, Instituto Juan de Herrera, 2003, 811–15; A. Van der Perre, 'Quarry marks of the Amarna Period. The limestone quarries of Dayr Abū Hinnis.' In J. Budka, F. Kammerzell and S. Rzepka, eds, *Non-textual Marking Systems in Ancient Egypt (and Elsewhere)*, Hamburg, Widmaier, 2015, 69–80.
41Engelbach, *Obelisk*, 17–21, Pl. VI.
42Lehner and Hawass, *Giza*, esp. 42–5, 393–401, 420–61, supply most of the information in this section about the Giza plateau; also Lehner, 'Labor'.
43W.M.F. Petrie, *Gizeh and Rifeh*, London, BSAE, 1907, 9.
44K. Kromer, *Siedlungsfunde aus dem frühen Alten Reich in Giseh: Österreichische Ausgrabungen 1971–1975*, Vienna, VOAW, 1978. A clarifying review is by K.W. Butzer, *JNES* 41 (1982), 140–1. Also Lehner and Hawass, *Giza*, 56–7, 386.
45Lehner and Hawass, *Giza*, 354–88; Lehner, 'Labor'; Moeller, *Urbanism*, 126–39.
46Lehner, 'Labor', 407–13.
47Muhs, *Economy*.

5

Model communities

Bureaucracy, although characteristically concerned with minutiae, cumulatively deals with large sections of society and to some degree shapes it. Nowadays this tends to be done through the deliberate pursuit of social goals, and to be part of the processes of 'planning' and 'social engineering'. The modern landscape bears witness to this in the size, nature and distribution of towns and villages, as well as in the appearance of individual buildings. Past societies also have left their stamp, their signature, on the ground. It is this that archaeologists most frequently encounter. The record that they make is inevitably shaped in the visual language of ground plans – a symbolic language of its own – frequently incapable of resolution into the terms of the builders' original intentions and the users' continuing adaptations. Even in well-documented societies such as that of ancient Egypt it remains extremely difficult to determine the specific purposes for which individual rooms and sometimes whole buildings were made. But building and settlement plans still remain the most widespread testimony of one particular facet of the creative element in society: its capacity to structure its own environment, and beyond this, its power to create visions of how human society should look. Where people live – shanty town or garden city – is a statement about not only their own personal circumstances, but also their society more generally. To see the shapes of towns, ancient and modern, as microcosms of society gives us the most consistent basis there is for comparing societies across space and time. For whereas the survival of written records owes much to chance, and for some societies may amount to nothing at all, archaeology has a good worldwide record for the recovery of plans and other material information about the places where communities once lived. Moreover, as soon as we admit that the evidence in a particular case points to a clear and consistent ideal, then we are tacitly admitting the existence of an ideology. This is not necessarily one that has been formally conceived and expressed, as in the case of Egyptian kingship, but an implicit ideology of social ordering.

Modern architects initially create their buildings, be they an airport or an entire housing development, as drawings and models on a small scale. The hoped-for harmony of the end product can be seen at a glance and discussed in comfort. We do not know if the Egyptians, even when considering large temples, ever did more than make working sketches for use on the spot (Figure 5.1). What is likely to have been common is that planning and discussion were done directly on site at full scale. Ropes and pegs and simple sighting instruments took the place of scribal equipment, whilst the ground served instead of the papyrus sheet.[1] It may have been more laborious, but the supply of labour was never a problem. The plan that first became really visible was the pattern of foundations in the ground. When corrections or alterations were made, instead of remaining only as marks on a plan on perishable materials, they were likely to become permanently recoverable to the archaeologist when exposing the foundations.

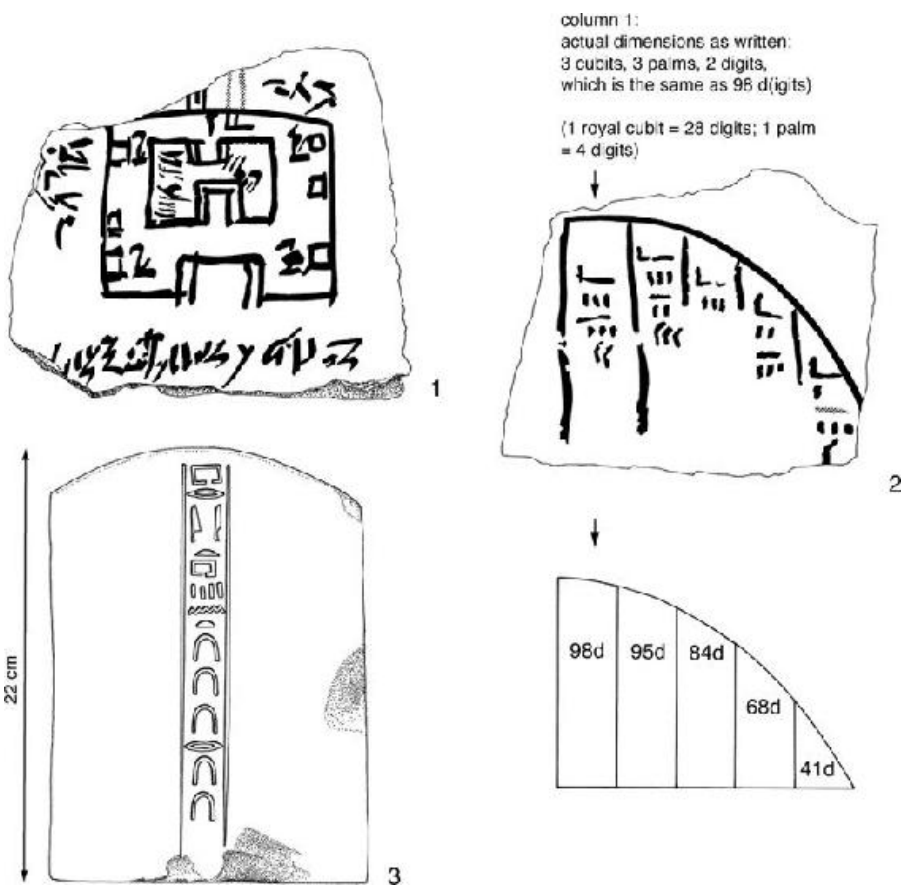


*Figure 5.1*Practical scribal aids to building: (1) A quick sketch with overall dimensions may have been all that was necessary to start the builders off, marking out the ground and digging the foundations. In this case the sketch is on a piece of broken pottery, and dates to the late Eighteenth or early Nineteenth Dynasty. Brief annotations, including measurements, are written in hieratic. The building was evidently a temple way-station open at each end, containing an inner chamber also open at both ends, and surrounded by a colonnade. The outside measurements were 27 cubits (*c*. 14 m) each way; the inner shrine was to be 14 × 6 cubits. Six columns are shown at the sides (labelled 'column' against four of them), but this may not have been the exact number intended. Details were probably worked out on the stonework as the building proceeded. Width 9.5 cm. British Museum 41228, from Deir el-Bahari. After S.R.K. Glanville, *JEA* 16 (1930), 237–9. (2) A diagram sketched on a flake of limestone showing how to draw an even curve. At regular intervals (of one cubit each, though this is not stated) one should draw a perpendicular line of a stated length. The lengths are given in the cubit notation (here reduced for convenience to digits). When the points at the ends of the lines are joined a curve is produced. From Saqqara, perhaps Third Dynasty and used in the building of the curved top to the Southern Tomb of the Step Pyramid. Width 17.8 cm. Egyptian Museum, Cairo JdE 50036. After Clarke and Engelbach, *Masonry*, 52–3, Figs 53 and 54; Strudwick, *Texts*, 153. (3) Limestone tablet from Kahun, perhaps used to mark out the position of an intended group of houses. The inscription reads something like the following: 'A four-house block – 30 × 20 (cubits)', i.e. *c*. 15 × 10 m. After G.A. Wainwright, *ASAE* 25 (1925), 144–5, and plate; also H.G. Fischer, *CdÉ* 55, no. 109–10 (1980), 13–16. Also Rossi, *Architecture*, 101–22.

In the process of creating buildings and especially complete settlements to which some degree of care was to be given three elements came together. The first was the likely system of measuring over long distances, using a rope knotted at set intervals, as was used in land survey. When the ground was relatively flat and the buildings were intended to be rectangular a certain frequency of measurements tended to recur. The second element was the range of functions that each building was to house, expressed on the ground by a pattern of partition walls to create rooms and corridors. It was normal at this stage not to mark the positions of doorways. The third element was the natural sense of proportion and harmony which all of us have and use, for example, in arranging furniture in our living rooms. The result was often a plan that looks as though it were the result of a much greater degree of premeditated planning based on a mathematical knowledge of the harmonies of natural proportion than was actually the case.[2]

The shape that an individual settlement takes will lie somewhere between two poles of ordering. One is that of the scheme that is fully thought-out before any work is done on site. It requires estimations of the shape and size of the community which will occupy it. An example from Tell el-Fara'in (Buto) was given in Chapter 2 (Figure 2.13, p. 85).[3] Thought to be perhaps a 'palace' and dating to the First Dynasty,

a rectangular area measuring at least 50 × 45 m (and aligned, it would seem, to the cardinal points) had been partitioned into a series of units contained within an enclosure wall. Each unit was given a dense internal layout of many rooms reached by corridors that constantly turn at right angles. The final compact, interlocking design has needed a particular kind of visualization to make it work. The problem to be solved was that, knowing that a certain number of key destinations of significance (such as personal chambers and places where valuables were stored) had to be made secure by means of an indirect system of access, how to lay it out on the ground with a sufficiently economic use of space and route distance? The answer is likely to have been found by laying out the main building units on the ground, subdividing them and then, only as a last step, with continuous lines of foundations in place, deciding where the doorways would be placed. Convoluted internal plans were seen as a solution to providing privacy and security for a long time, exemplified by the large houses at the Middle Kingdom town of Kahun (Figure 5.11, p. 214).

The opposite pole to full planning is not disorder or randomness. It is that of self-organization. Self-organization refers to the inescapable natural order that, at the human level, arises when people interact.[4] It appears as a pattern of mutual comfort zones when families make temporary encampments on a sunny seaside beach; it produces traditional African villages; in Egypt of the New Kingdom it resulted in the large residential areas of the city of Amarna (Chapter 8, Figures 8.7 and 8.12, pp. 336 and 350). For earlier periods, the Fourth Dynasty workers' town at Giza, the Heit el-Ghurab, seems to be a combination of both processes (Figure 4.9, p. 190). The Western and Eastern Towns look like the product of self-organization (although this is not a sign that its occupants were of inferior status). The sets of galleries, if we understand them correctly as barracks, represent a limited degree of prior thought and of positioning of the units by an external source of authority. That external source of authority did not, however, dictate the appearance of the entire town.

Early town layouts and the 'village horizon'

The study of towns is somewhat hampered in the English language by ambiguity in the common words available. The Latin 'urbs' has given us the adjective 'urban' and the abstract noun 'urbanization' but not a

concrete noun for the larger places where people live. Instead we use 'town' and 'city' somewhat arbitrarily distinguished. The ancient Egyptians, too, had a pair of words that are conventionally translated as 'town' and 'city' but their usage, too, offers a poor guide to drawing distinctions. I make this point because in absolute terms places that, in the earlier periods, functioned as towns could in actual size be more akin to what we would see as villages, whilst the capital of a province might not be much larger. This does not mean that ancient Egypt was under-urbanized. Rather it exemplifies the generally more modest scale of Egyptian society compared with what is normal experience in much of the present world, a scale commensurate with the modest size of the population. Archaeologists tend to fall back upon the neutral term 'settlement', but this often does not feel right when one is thinking of a place that, whilst it might have been quite small, was nevertheless the centre of local life and administration, and had joined the ranks of places of importance in Egypt's symbolic geography, homes to the gods, in fact.

During the Old Kingdom (and sometimes before that) at many places towns came into existence. Commonly they were surrounded by a thick brick wall, sometimes following a curving course, sometimes built in straight sections. The lack of conformity in what must have been the town's major building work – its perimeter wall – implies that they represent local initiatives rather than the result of royal decrees and central direction, but whether true or not, perimeter walls played a significant part in shaping the internal layouts of individual towns. Buildings close to the town wall tended to align themselves by it, perhaps actually using it to prop up the whole structure. The alignment of adjacent streets could be similarly influenced. If the town wall were built as a series of straight sections then the interior would tend naturally to contain a degree of internal regularity. A clear early example is Hierakonpolis (Figure 5.2).[5] The Old Kingdom wall enclosed an irregular area, but by means of a series of straight lengths. A broad diagonal swathe of the town has been excavated, together with a few isolated patches. Within these exposures we can see a tendency for walls and the narrow streets to follow similar directions for some distances. At the south end the direction is set by the southern stretch of the enclosure wall. In the central area, however, it was set by an existing but by then ruined wall of an earlier palace (Figure 2.9, p. 79), which seems also to have been matched by the northern stretch of town wall. Similar house alignments taken from the nearest length of town wall can still be seen in parts of the Old

Kingdom/Middle Kingdom towns at Tell Edfu and Abydos.[6] Town walls require a judgement of how large the town will be. In these examples there is also an implication of prior site clearance that allowed the new houses to reflect the new wall alignments. This in turn points to a measure of local control or mutual agreement sufficient to bring about the remodelling of the whole community. At Hierakonpolis, as far as one can tell, the size of the future town was correctly assessed. At Tell Edfu (and at Elephantine; see below) the expansion that subsequently took place required the walling of additional adjacent areas.

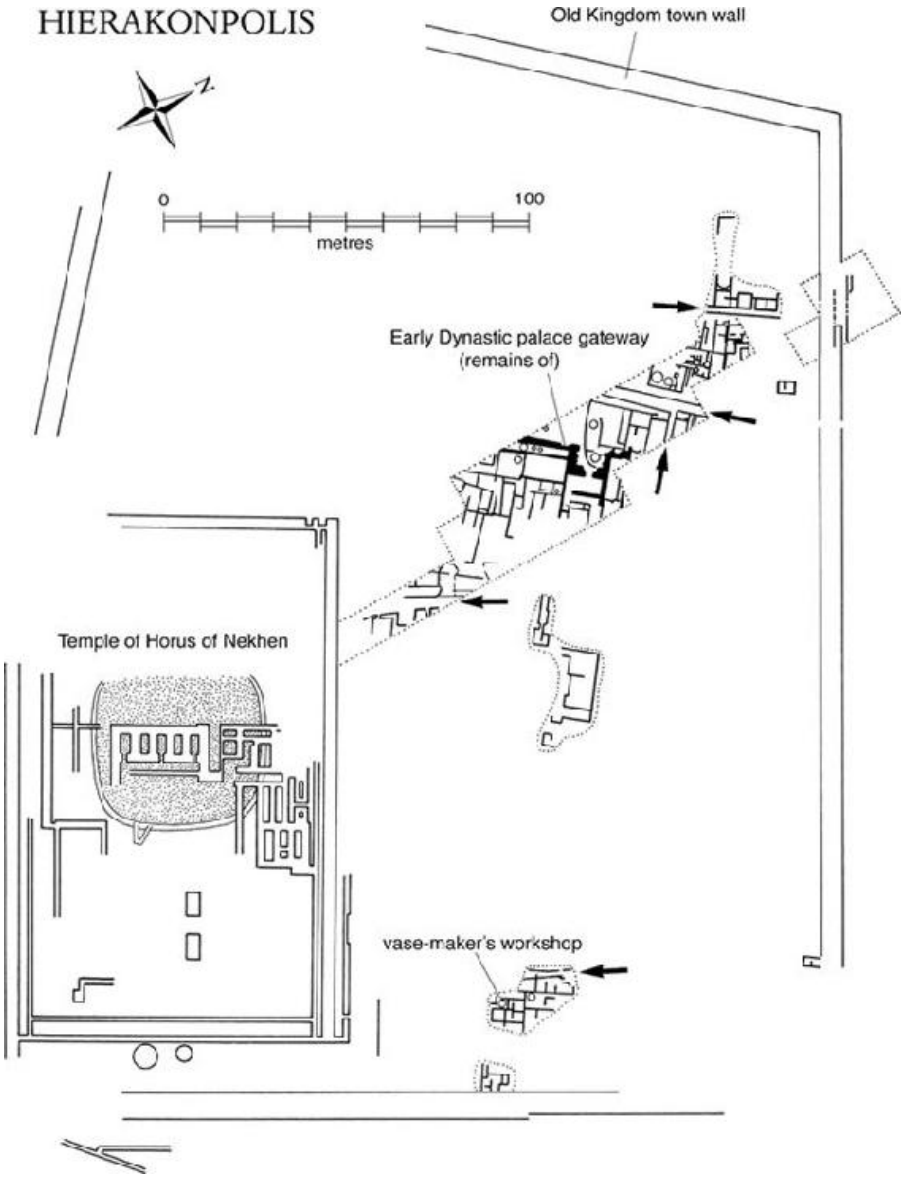


*Figure 5.2*Urban layout with a degree of regularity dictated by a town wall: the Old Kingdom town of Hierakonpolis (see also Figure 2.8, p. 77, Figure 2.9, p. 79, and Figure 3.9, p. 130). The arrows point to probable streets. After Quibell and Green, *Hierakonpolis* II, Pl. LXXIII; W. Fairservis, *JARCE* 9 (1971–2), Figs 3, 9–15; also Moeller, *Urbanism*, 94–6.

The most thoroughly studied early town is Elephantine, the object of regular major excavations since 1969 (Figure 5.3). Allowance has to be made for Elephantine having been a frontier town and therefore requiring an additional measure of protection, even to supporting a garrison, yet it is still possible to interpret its history as an interaction

between royal initiatives and local community interests.[7] A village had developed on the island in the Predynastic Period (in the Nagada IIC/D phase). In dynastic times it grew into a small walled town, its irregular shape reflecting the underlying granite island. The exposures of the interior made by excavation reveal narrow irregular streets and buildings that were, for the most part, little more than huts, although a more substantial central building developed in the later Old Kingdom, lasting (and being structurally modified) into the late Middle Kingdom. Some characteristics suggest an administrative centre and thus that the building was a residence for the official who was in charge of the town (hence the term 'governor's/mayor's residence' is appropriate). Other characteristics seem to belong more to places where the spirits of named and revered individuals were honoured. Wooden panels at the main entrance are carved with processions of figures (originally named) which included a high official and probably his wife. The panels are of a type which one would expect to find at a tomb. Other items, including wooden shrines and small statues, are also suited to the performance of cult. As for the people commemorated, two of them were, in succession, the governors Hekaib and Sabni of the Sixth Dynasty. The blurring of commemoration and cult with the practical exercise of power and administration is a valuable lesson in itself, urging us to caution in imposing discrete categories on the past. Deference towards honoured individuals, when alive and when dead and utilizing special places and objects, was part of the continuum of existence, appropriate to an office and to a place of burial as well as to a 'shrine'.

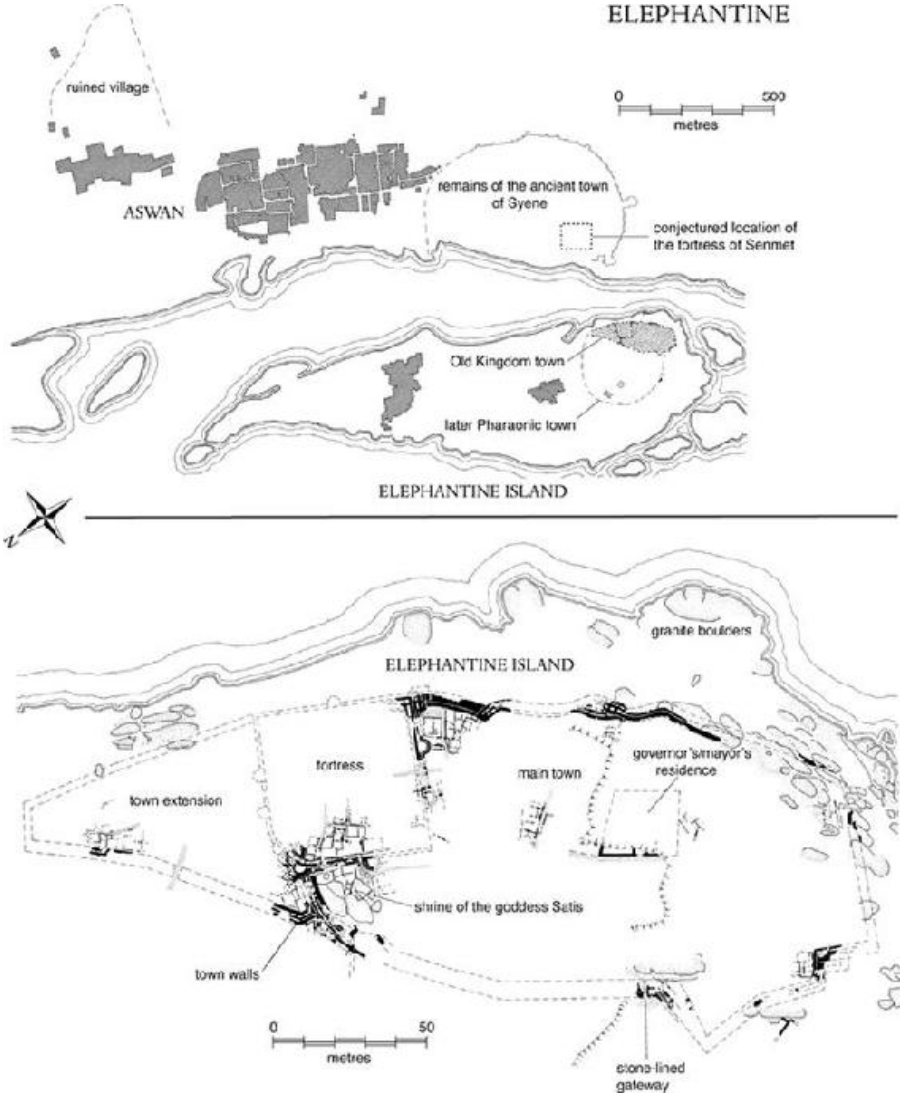


Figure 5.3Below. The town and fortress at Elephantine, Early Dynastic Period and Old Kingdom. After W. Kaiser et al., *MDAIK* 55 (1999), Abb. 55. *Above*. Comparisons of settlement size over time at Elephantine and Aswan. The 'modern' settlements (cross-hatched) are those of 1798; see *Description de l'Égypte*, *Antiquités* 1, Pl. 31; also H. Jaritz, *MDAIK* 43 (1968), 68, Fig. 7; C. von Pilgrim, K.-C. Bruhn and A. Kelany, *MDAIK* 60 (2004), 119–48; Bard, *Encyclopedia* (entries on Aswan and Elephantine, by E. Seidlmeyer and W. Kaiser).

Also in the Early Dynastic Period a more regular walled enclosure provided with rounded towers was inserted into the north-eastern corner. It has been interpreted as a fortress built under royal control, although again its interior has a strongly village-like character (rather like the interior of the Hierakonpolis palace compound; see Figure 2.9, p. 79). One consequence of this intrusion was the confinement of the

early shrine (which became the shrine of the goddess Satet) to a marginal location in the town plan (Figure 3.4, p. 119). As discussed earlier (pp. 116–18), the shrine itself is a good example of a place where people of the town could comfortably commune with imaginary beings, and which eventually attracted royal patronage.

From a little later, some of the varied aspects of life at Elephantine are captured by one excavated neighbourhood of the Middle Kingdom defined by the buildings along a single street (Figure 5.4).[8] In even later centuries Elephantine came to be dominated by a colossal temple to the creator god Khnum, personified by a ram. Probings beneath the foundations have so far failed to find an Old Kingdom/Middle Kingdom predecessor, implying that, if it existed, it must have been small. The Satet shrine in its niche had, by the early Twelfth Dynasty (reign of Senusret I), been replaced by a stone temple of finely carved masonry though still of a modest size. The street in question lay separately and may have been a 'quarter' with its own character. At the south end a shrine was built (or rebuilt) at the beginning of the Twelfth Dynasty by the local family of mayors and chief priests (its founder named Sarenput). It honoured not a conventional deity but an earlier governor named Hekaib who had lived in the late Sixth Dynasty, the likely occupant of the 'governor's residence' mentioned earlier (and who had been buried in the desert cemetery on the west bank of the Nile). Hekaib is a fine example of how a figure could attract such respect in his lifetime as to create a cult which could then last for generations. Over the next three centuries (into the Thirteenth Dynasty) members of the Sarenput family and others, including kings, added their own statues and tiny shrines within the confined space of the walled courtyard. Texts speak of Hekaib as a god who could benefit those who served him. Along the street facing the shrine lay houses, what was apparently another shrine to an official named Sebekemsaf, and eventually a building perhaps with a corner tower; this, to judge from the many storage units and from the finding of hundreds of mud seal impressions or sealings, was an administrative building from where rations were distributed. The homogeneity and human scale of the whole neighbourhood is notable. No part seeks to dominate.

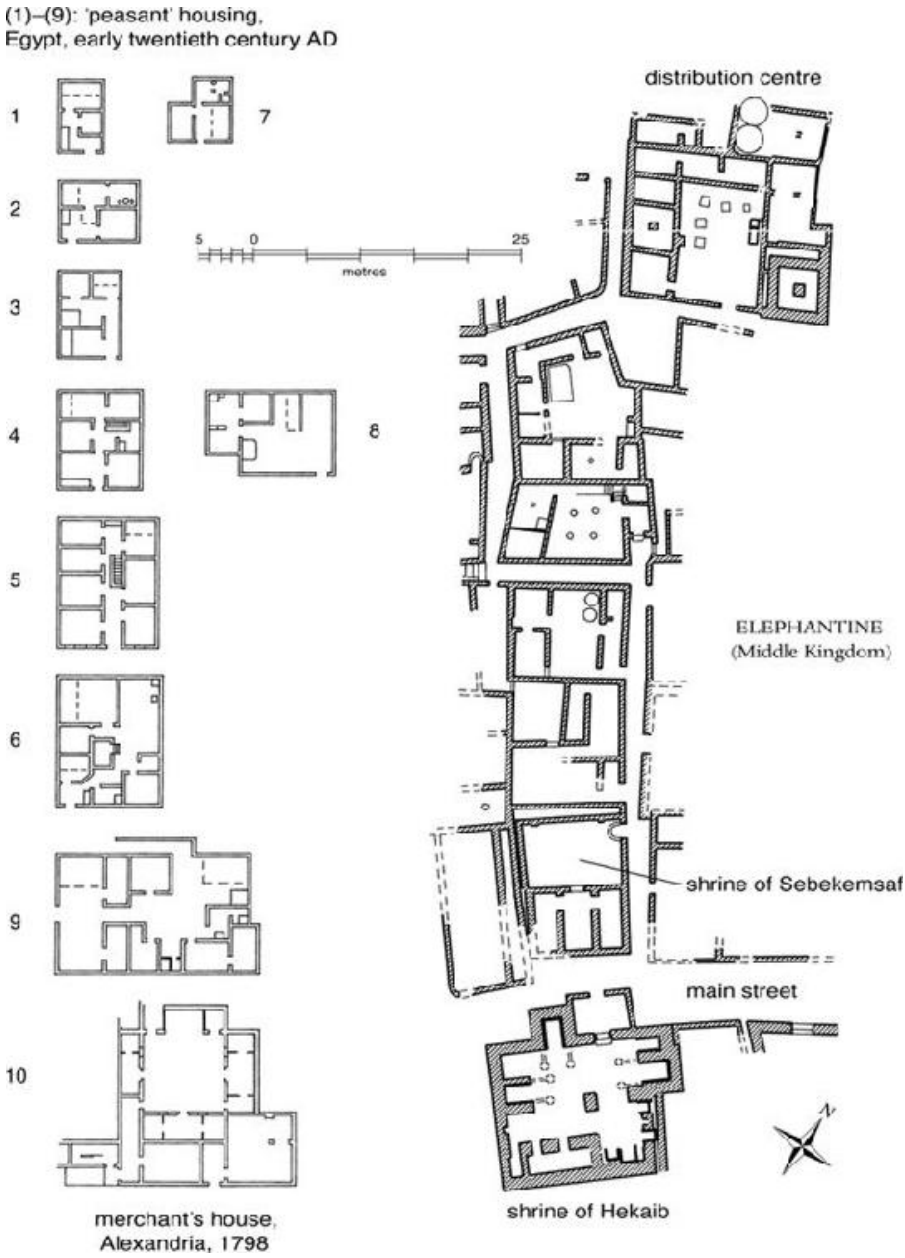


Figure 5.4Right. A street in the town of Elephantine in the Middle Kingdom. Note how the shrine of Hekaib (a long-dead governor and now one of the leading local gods) blends with its surroundings. After *Elephantine; the Ancient Town*, 45, Abb. 9; see also W. Kaiser et al., *MDAIK* 55 (1999), Abb. 56. *Left*. A series of plans of houses of peasants, from the landless – (1), (2) and (7) – to the prosperous (9), recorded in Egypt in the early part of the twentieth century AD, after Lozach and Hug, *L'habitat*, 124–34. The merchant's house in Alexandria, *c*. 1798 AD, is from the *Description de l'Égypte, État moderne*, II, Pl. 91.6. All parts of Figure 5.4 are to the same scale. Although many cover similar areas of ground, they may have risen to different heights to accommodate different numbers of storeys.

Elephantine helps to define the scale and character of Egyptian society in its earlier phases. Alongside the detailed map of early Elephantine (Figure 5.3) I have inset (at a smaller scale) a map of the area that also shows the approximate outlines of settlements at two later periods. One is Late Roman (Byzantine) and the other early modern (as mapped by Napoleon's expedition in 1798). After the Old Kingdom Elephantine continued to grow until it occupied about three times its former area, but a twin town on the east bank also began to develop in or after the New Kingdom. Under the name Syene (Aswan), it was to overshadow its predecessor. Eventually it reached about six times the area of the Old Kingdom original. The area of settlement recorded in AD 1798 is a little larger still even though it is generally thought that, at this time, Egypt's fortunes were at a low ebb. On Elephantine itself, the twin modern villages roughly equal the size of the Old Kingdom town, yet the present state of knowledge provides no grounds for thinking that there was a town on the east bank in the Old Kingdom. The population seems to have lived primarily on the island. When island and mainland are taken together, there is thus an even bigger difference between the area of settlement of the Old Kingdom and that of early modern times. This is a commonplace observation for Egypt generally. Places of ancient settlement that we are entitled to call towns were often small even when compared with the villages of the early modern landscape, let alone modern towns. Why should this be so?

One direction in which to look is the size of houses and how far they might differ between those of the poor and the rich across the various periods. As a point of comparison, I have added to Figure 5.4 specimen plans of houses of peasants from Egypt of the early twentieth century AD and a late nineteenth-century merchant's house. The comparison, though somewhat superficially based, does not suggest that the explanation lies here, for there is a rough comparability. I can only assume that the disparity in settlement size primarily reflects the overall size of Egypt's population in a landscape containing a roughly similar number of settlements. It is estimated that between the Old Kingdom and Roman times the population grew from just over 1,000,000 to perhaps just under 5,000,000, though the estimate for AD 1798 is around 4,000,000.[9] This approximates to the order of magnitude by which the settlement sizes differ.

Egypt's population at the time of writing has grown to 95,000,000 (2017 census; with a rate of increase of 1,000,000 every six months). Although popular journalism emphasizes the 'timeless' quality of the

rural landscape of Egypt, it cannot be a good guide to what it was like in Pharaonic times generally, and more especially in the Old Kingdom. The valley landscape, richer in wildlife and with far more lush vegetation, would have seemed oddly deserted and lacking in mechanical noise by comparison with today. And although we are right to talk about urbanization and to see towns as the normal home for a large proportion of ancient Egyptians, those towns, even when walled, actually covered less ground than most villages of modern Egypt. For a long time the Egyptian perception of what a town should look like was determined by a 'village horizon', which did not embrace significant public architecture. An appreciation of urban grandeur developed slowly. The best-preserved city from Pharaonic Egypt, Amarna of the Eighteenth Dynasty (Chapter 8), lies only part way along that perceptual journey.

Societies do not necessarily maintain uniformity of scale across the built environment, however. Many that occupy an early position on the timelines of archaeology proved able to direct a degree of organization and skill towards monuments that seem, with hindsight, to be markedly out of proportion to the scale of their general way of life. The megalithic monuments of Europe and Malta, the statues of Easter Island, the large sculptured blocks and statues of the Anatolian society of Göbekli which was still at a hunter-gatherer stage, all are examples of a striving towards an exaggerated scale for significant creations which was not a measure for the rest of life.[10] So, too, for Egypt of the Early Dynastic Period and Old Kingdom, where the direction of extra effort was towards tombs, including pyramids, and the statues of kings and nobles which were often placed within them. Cemeteries, including that for Elephantine, seem to have absorbed more of the community's labour and ambition for social display than either the houses or shrines in their towns.

The later Old Kingdom also supplies an example of a new town built on virgin ground, in the Dakhla Oasis at the site of Ain Asil (Figure 5.5). This is the kind of circumstance where one most expects to see demonstrated the organizing powers of the state.[11] What was created was substantial yet piecemeal. At its centre was a well-built mud-brick fortified town, its nucleus roughly 170 m square and surrounded by a stout wall reinforced by semi-circular towers which also flanked one of the entrances. Two later enclosures added to the sides almost doubled its area. One of them contained a palace for the governor, built during the reign of Pepi II, its enclosure measuring 220 × 95 m. Its narrow streets and angled alignments give it a village-like

appearance. There was, in addition, a population dispersed over the surrounding territory, some of them living in a separate town (Ain el-Gazzareen, founded in the Fourth or Fifth Dynasty),[12] and the whole development was under the control of a line of 'governors of the oasis', who bore Egyptian names. They were buried in a cemetery about 1 km from the town, beneath large mud-brick tombs provided with chapels and accompanied by fine grave goods. As is known from places in the Nile valley (the case of Hekaib on Elephantine is a good example), the cult of governors also had a prominent place in the town itself. A group of chapels built for their benefit is so far the only representative of architecture in the service of cult that can be identified inside the town. No separate temple can be identified. The size of the tombs and prominence of the chapels of governors at Ain Asil exemplifies the priority that Egyptians at this time gave to buildings which marked social status through personal statue cults. It contrasts especially with the Egyptian colonial towns in Nubia in the New Kingdom where, illustrating a different order of priorities, stone temples, rivalling in size those built in Egypt at this time, celebrated national gods and the king and dominated the interiors of the towns.

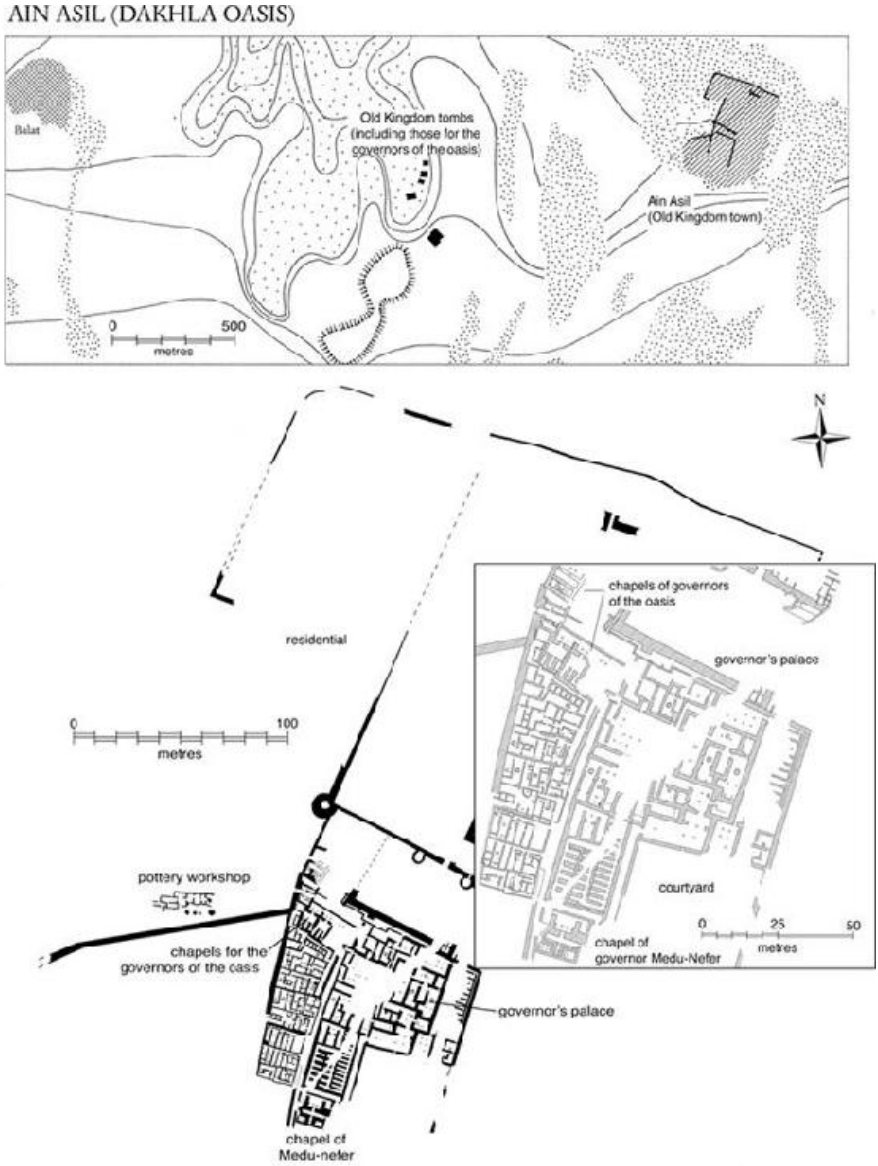


*Figure 5.5*A late Old Kingdom colonial town: at Ain Asil, in the Dakhla Oasis. The map shows the relationship between the ancient town and its separately lying cemetery, some of the tombs containing rich burials. Balat is the nearest modern town. A more detailed plan of the excavated parts of the ancient town is given as an inset. Note that the only identifiable places of cult are in honour of the governors of the oasis. After C. Jeuthe, V. Le Provost and G. Soukiassian, *BIFAO* 113 (2013), 217, Fig. 1; D. Laisney, *Balat* IX. *Cartographie de Balat*, Cairo, IFAO, 2010, Pl. 1, Fig. 16.

The way of life of the colony at Ain Asil, to judge from the architecture of town and cemetery, the pottery and other artefacts found, and the administrative framework that is visible from texts, seems to have been Egyptian. There has to be a strong presumption

that the governors, and perhaps many of the inhabitants, had in the beginning been sent out, or had volunteered to go out, from a home base in the Nile valley. The sense of exile was in this case not strong enough for them to seek repatriation and burial in Egypt proper.

Such of the order that we see in these early towns is likely to have arisen from immediate convenience, and one must be careful in applying to it the term 'planning' if, by this, one means a degree of forethought that goes beyond some fairly basic decision-making and even the pursuit of idealized visions of society. Moreover, the uncertainty over who was responsible for initiatives in provincial town developments fogs the question of how far the Old Kingdom state had an interest in determining urban layouts. Fortunately, there is another set of examples that does provide an answer of a kind.

Pyramid towns in the Old Kingdom

Organized life at pyramid sites did not end with the completion of the stone buildings and burial of the king. From Old Kingdom written sources we know of the existence of 'pyramid towns', looked after by a hierarchy of officials. Altogether some 42 different titles of officials have been recorded, though many are rare. Where these titles can be ranked, they tend to be headed by a senior priest, or by a 'director of the town.' We should recall that, by this time and for some time to come, the leaders of provincial towns generally often bore the twin titles of 'mayor' and 'chief priest'. Being a priest, at least in the earlier periods in Egypt, was not to follow a calling but to have the job of looking after matters related to the cults of 'gods'; this itself is a wide category which included revered local leaders of society, one of whom was, of course, the king. The Neferirkara archive examined in the last chapter fills in the detail of how one such pyramid town was run. How were they represented on the ground?

The Neferirkara archive introduces us to a community busying itself in detailed daily bookkeeping exercises at one of the pyramids at Abusir. This is a good place to start looking. The most obvious traces of antiquity at Abusir were excavated first by a German expedition between 1902 and 1908 (Figure 5.6).[13] There had been, as usual, a mortuary temple built against the eastern face of the pyramid. It had consisted of the normal grouping of cult chambers, storerooms, colonnaded forecourt and entrance from the access causeway. It was a building finished cheaply, the forecourt and most of the storerooms

being in brick with wooden columns. One unusual feature came to be added when the causeway was rerouted to serve the adjoining pyramid of King Neuserra: a formal columned entrance portico. This alteration coincided with the building of an inner enclosure wall of mud brick. The spaces between this wall and the stonework of the temple were filled with mud-brick buildings. Some of them appear to be houses. We can have little doubt that they belonged to the official community of those assigned (and paid) to look after King Neferirkara's mortuary cult. We can recognize from the plan probably no more than nine separate 'houses'. They must be where those on duty – the serving phyle – resided whilst doing all the tasks so meticulously recorded in the papyri. As an example of a model community it falls into the 'out of sight, out of mind' category. The sole element of order was provided by the enclosure wall that fitted in with the pyramid's monumental exterior, and hid from the outside world the huddle of houses on the inside.

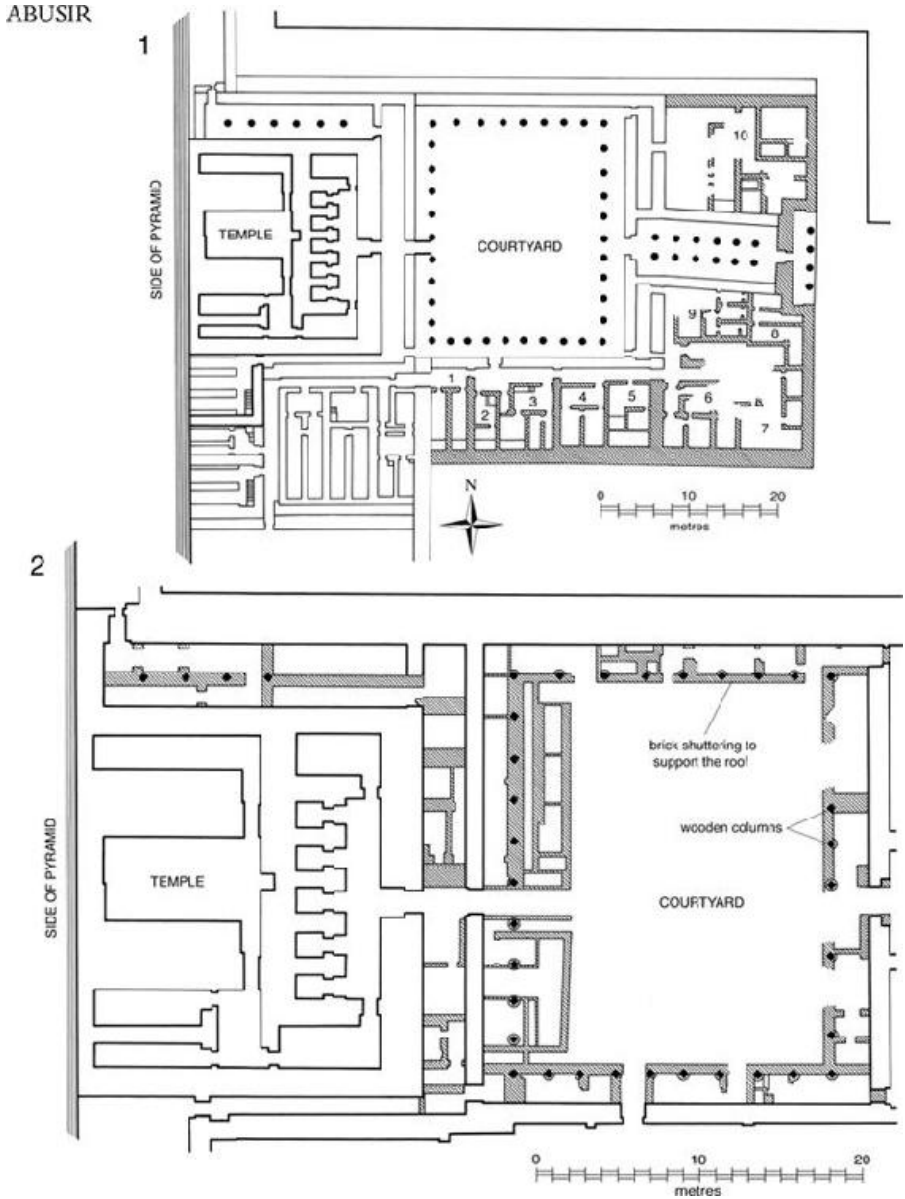


*Figure 5.6*The decay of a monument and the archaeology of maintenance: the mortuary temple at the pyramid of King Neferirkara of the Fifth Dynasty at Abusir. (1) Thicker lines of the temple represent stonework; the rest was built in mud brick. The hatched portion represents the pyramid 'town' built following the completion of the monument. Buildings 1 to 9 are presumably houses; the function of no. 10 is uncertain. (2) The same mortuary temple, a generation or more later. The hatched portions are brick supports and shutterings built by the temple staff to keep up the roof of the colonnade around the forecourt, and the roofs of the eastern and northern corridors of the temple. The columns had been of wood, and there was evidently a danger of the whole front of the temple collapsing. The extra shelter provided by the support walls was utilized where convenient for cooking-fires. After Borchardt, *Grabdenkmal*, 56, Abb. 63, Blatt 10.

This ‘town’ could have accommodated only a small community, fewer, one would guess, than those who appear in the lists of the Neferirkara archive. Yet it must be remembered that temple personnel put in a month’s work only periodically. The permanent homes of these people may have been elsewhere. Where we lack direct evidence altogether is in whether their permanent homes were in nearby villages that had grown up piecemeal, or whether the state had provided a complete planned town for them all, now buried beneath the fields of the nearby floodplain.

The same site also highlights a problem faced by all states that foster grandiose building, namely, maintenance. By the end of the Old Kingdom Egypt possessed more than 20 major pyramids with their associated temples, constructed with varying degrees of solidity (and not all of them finished). The Neferirkara temple was one of the less well-built examples. During the lifetime of its ‘town’ roofs became dangerous and the wooden columns weakened, no doubt from the attacks of termites that quickly turn their attentions to woodwork in desert locations. The response of those in charge was to shore up the threatened parts with brick walls and shuttering (Figure 5.6 (2)). It badly disfigured the building, shutting off much of the colonnade around the forecourt, but it presumably achieved its purpose.

From this, and from the even more cavalier treatment of Menkaura’s Valley Temple by its community to be described shortly (and the much later replacement of the neat brick town surrounding the mortuary temple of Rameses III at Medinet Habu by an irregular village-sized town, Figure 8.17, p. 362), we may deduce that there was no general policy towards, or means of funding, the maintenance of the stock of historic buildings. At any one time a significant proportion of them would be derelict or shabby. We sometimes read of kings restoring particular temples, whilst Rameses II’s eldest son, the priest Khaemwese, even took an interest in restoring a few of the ancient pyramid sites. But this was a piecemeal process that cannot have kept pace with the decay. The principal improvement came with the New Kingdom, when a general policy was followed of replacing old temples in the towns with new ones of stone. But still the unequal fight against time did not go unnoticed. A poet of the period wrote, with respect to the tombs of famous wise men remembered for their teachings:

> Their portals and mansions have crumbled,
> Their mortuary-priests have vanished;

Their tombstones are covered with dirt,
Their graves are forgotten.
Yet their name is pronounced over their books,
Which they composed whilst they had being.[14]

Returning to the Old Kingdom pyramid towns: by the time of the Fifth Dynasty pyramids at Abusir the peak of monumentality in pyramid building had already passed. Can we find more substantial traces at Giza?

The workers' town, the Heit el-Ghurab, lasted only for as long as the pyramids at Giza were being built; and it lay outside the huge stone wall that closed the pyramid area to the south (Figure 4.9, and p. 190). The broad intention of those responsible for the Giza pyramids and surrounding tombs was to bequeath to an indefinite future a manned offering-cult for everyone buried there, paid for by bequests of land. If it had worked as planned it would have created a daunting schedule of regular performance across a veritable city of tombs. Amongst the recipients were not only the three kings who built the Giza pyramids but queens, princesses and princes, as well as others of lesser status who had gained a place of burial at this most prestigious of sites. As a means of servicing this industry of funerary cults, at least across the southern half of the pyramid plateau, a specially built town was founded and maintained to the end of the Old Kingdom (a span of more than 300 years). Whether one or more further towns serviced the northern half of the plateau, and were located on lower ground now built over, is not known. The focal points of this southern town were two of the large monuments themselves. One was the tomb of Queen Khentkawes I, who died at the end of the Fourth Dynasty and seems to have been particularly honoured. The other was the Valley Temple of Menkaura's pyramid which stood on the desert plateau rather than on the low-lying edge of the floodplain.[15]

The layout and position of the town were a compromise which achieved the aim of locating the community on the desert plateau, perhaps straddling one of the main points of access, but at the expense of fitting a determined attempt at a planned settlement on to a highly uneven ground surface. The result was one modest L-shaped town and, set at an angle to the southern part of the L, an extension into Menkaura's Valley Temple. There was thus no attempt to create one small town or village for each major place of funerary cult. This is most obvious in the case of Menkaura's huge mortuary temple built

against the east face of his pyramid. Although administrative seals and fragments of two inscriptions, probably decrees, bearing the name of King Merenra of the Sixth Dynasty show that the cult was maintained to the end of the Old Kingdom, those who performed it seem not to have lived there. This is one reason for suspecting that the servicing of the myriad cults on the Giza plateau was delegated to one (or two perhaps) professional cult communities. Much of the evidence that we can most easily grasp, such as the physical layouts of cult places and the written evidence for cult performance, leads us to expect several or many separate groups, each with its own identity, hierarchy and places of work laid out to correspond to specific activities. The Giza mortuary cult town suggests that we should lower our expectations.

At its western end the town joined the mortuary temple cut into the face of the rock podium of the tomb of Queen Khentkawes (Figure 5.7; Figure 4.8 (A–B), p. 187, shows the location).[16] From this point a long narrow mud-brick compound ran down the slope in a straight east–west line for *c*. 150 m, ending at a steeply dipping rock face which seems to have been the edge of a basin. Along its south side ran a double street, and on the north a single one. A girdle wall, 2.5 m thick, marked the boundaries on these sides. To the east, an annexe ran southwards, measuring 80 × 40 m, giving to the whole complex an L-shaped plan. Several entrances are visible in the girdle walls. The street running south passed actually beneath the main east–west street by means of a tunnel using a staircase on the north and a ramp on the south. The long northern wing contains a row of 11 separate buildings, most of which are probably houses. In several cases the same plan is repeated with minor modifications. In the centre of the row are six such unit houses of similar plan, each measuring 12 × 15 m. The house plans show a certain resemblance to those at other sites of the Old Kingdom as well as of the Middle Kingdom. Within the interlocking rectangular rooms convenience of access seems often to be subordinated to privacy or security, leading to the use of corridors, anterooms and numerous turns, creating a minor labyrinth. In most of the houses a central room can be identified, which in one case had seen use as a place of sleeping and of food preparation. No signs existed that any of the roofs had been supported on columns. In two houses there were circular grain bins: a single one in the third house from the west; four in the sixth house from the west. Blackening of the walls of the central room at the back (or south) of one house suggests a kitchen. Over time, the occupants made changes to the layouts, blocking doors, making fresh partition walls and even blurring the

distinction between one original house and its neighbour.

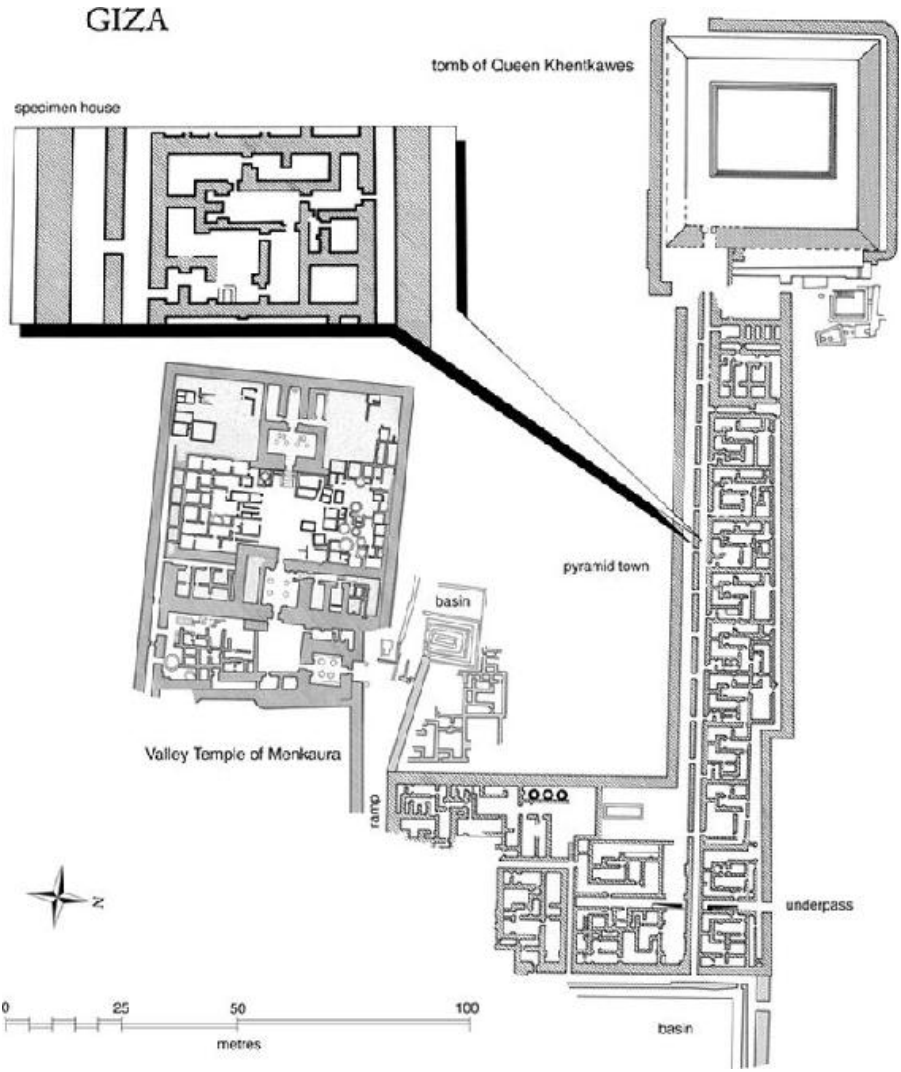


*Figure 5.7*Early urban planning: part of the town which probably housed the staff who serviced the funerary cults in the southern part of the Giza necropolis to the end of the Old Kingdom. One part, on the right and attached to the tomb of Queen Khentkawes, seems to have been built specifically for this purpose. The other, on the left, began as the Valley Temple for Menkaura's pyramid but was converted to dwellings and stores. For more detail see Figure 5.8. For the general location see Figure 4.8 (p. 187). After Hassan, *Gîza* IV, Fig. 1; M. Lehner, D. Jones, L. Yeomans, H. Mahmoud and K. Olchowska, 'Re-examining the Khentkaues Town.' In Strudwick, *Old Kingdom*, 143–91, p. 148, Fig. 4; 189, Fig. 25; Lehner and Hawass, *Giza*, 277, Fig. 11.33.

The southern wing of the Khentkawes town contains at least four separate buildings that may have been for residence or administration.

On the north side of an open space in the middle lay a group of four circular grain silos. This space was reached by means of a staircase on the west, reflecting the slope down from the desert. To the north of this court lay another, containing only a rectangular basin cut into the rock. Further excavation in the south and south-east of the town was prevented by the existence of a modern cemetery, but deep soundings revealed the presence of brick walls over a considerable area, but at depths of up to 6 m below the modern ground level.

The southern wing brought the town close to the front of the Valley Temple of Menkaura (Figures 5.7 and 5.8).[17] Menkaura's architects had planned that both his mortuary temple and Valley Temple would be built in the prevailing megalithic tradition. The king probably died prematurely, however, and both temples were completed in mud brick. In the case of the Valley Temple the walls of the central courtyard were decorated with niches in the panelled palace-façade style (Figure 5.8, Stage I). Outside the original front a formal addition in brick was made, which turned the entrance to the north, towards the adjacent Khentkawes town. It also faced towards a wide mud-plastered ramp which separated it from the Khentkawes town, a ramp which may have been one of the main routes of access to the Giza plateau. Behind the entrance, a two-columned portico led to a four-columned vestibule. This led in turn to a court which gave access to the interior of the temple. Further corridors and spaces were laid out beyond, to the south. But over this part small dwellings were raised, in places on accumulations of rubbish. Towards the south of these dwellings lay circular brick silos for storing grain.

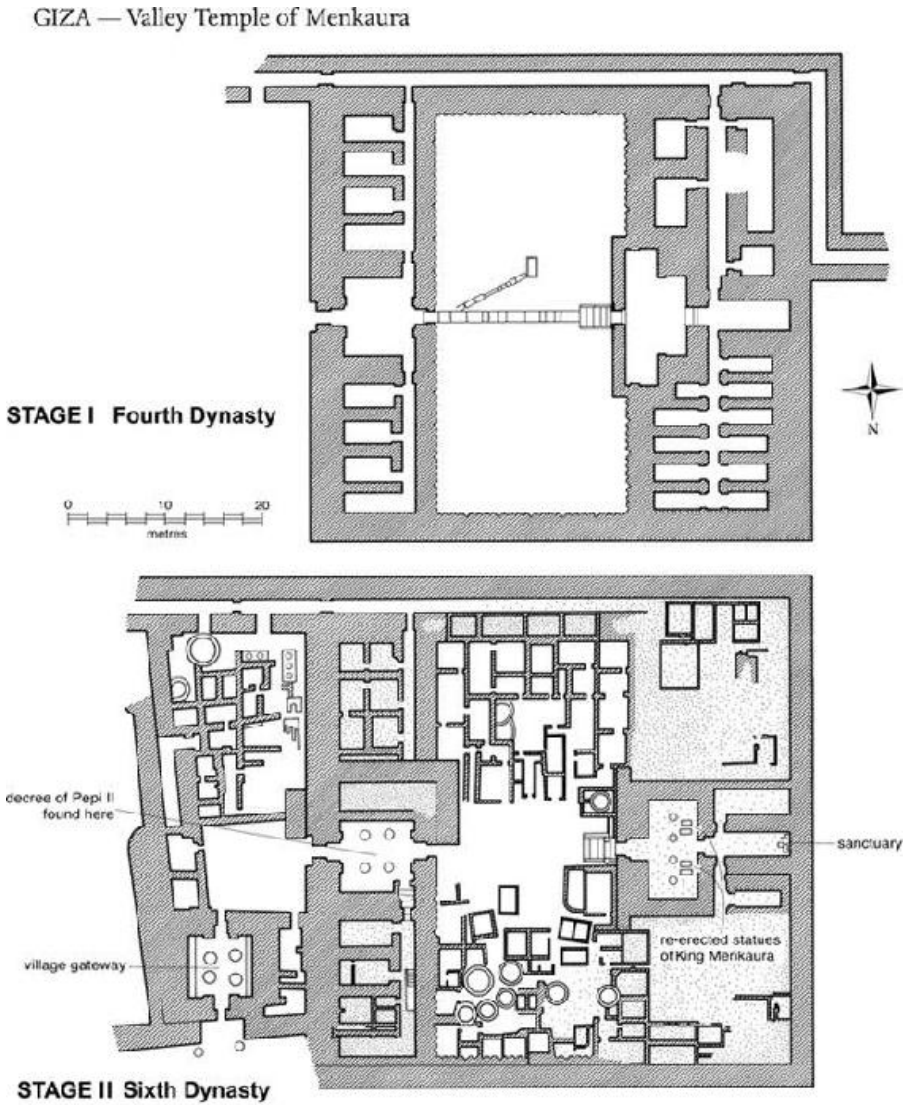


*Figure 5.8*The 'villagization' of a monument: the Valley Temple of the Pyramid of Menkaura (Mycerinus) at Giza (see also Figure 4.8, p. 187, for location). *Above*. Plan of the temple as finished after Menkaura's death (*c*. 2503 BC). Note the palace-façade decoration of the sides of the main court. The whole is a good example of formal, monumental architecture in mud brick. *Below*. The same building about three centuries later, in the time of Pepi II. The royal decree on a stone tablet found in the entrance hall shows that the building was still the officially designated pyramid town of Menkaura. As time had passed, the supporting community had moved in and built storage facilities, including granaries (the circular constructions) and perhaps small dwellings partly inside and partly on top of the remains of the temple. Its thick enclosure wall and twin massive gates made it, in effect, a fortified village. After Reisner, *Mycerinus*, Ch. III, Pls VIII, IX.

Subsequent to the completion in brick of the Valley Temple proper,

houses began to spread within the main courtyard. Circular granaries were constructed in some numbers, clustering towards the north side of the original court, as well as many rectangular bins made from mud bricks which perhaps were used to facilitate the distribution of rations. From this point onwards, most of the temple except for the sanctuary was allowed to decay. In places it was actually demolished to make further room for the expanding settlement, which gradually buried the lower parts of the temple. The plan shows walls constructed over thefilled-in ruins, particularly on the south and south-west sides, where houses mounted the old enclosure wall. The excavators also found a good deal of temple equipment still in the original storerooms, buried in the dust and rubble. In this category were the slate triads of the king and other figures which represent some of the finest work of Old Kingdom sculptors. The process of decay had been hastened by a flood from a sudden storm which had broken into the rear of the building. An attempt at renovation followed, but only on top of the debris. This recognized the existence of the settlement and surrounded it with a new wall. A new gatehouse and sanctuary were also built over the sites of the old ones. Anyone approaching the sanctuary, therefore, still had to walk from the gatehouse between two groups of huts and silos.

The new sanctuary had a vestibule with four columns. These had been of wood on limestone bases. On the mud floor, four beautiful life-sized statues of Menkaura were set up, two on each side of the door to the inner chambers. The offering-place of the rebuilt sanctuary was found more or less intact. It consisted of an altar, *c*. 50 cm high, made from a worn slab of alabaster resting on two rough upright stones. A crude libation basin stood beside it. Nearby lay four unfinished diorite statuettes of the king, lying on their side. They may have actually stood on the altar and been the object of the offering-cult in this last phase of the temple's existence.

The date and circumstances of this rough-and-ready cult being carried on in a dingy chamber at the back of a tightly packed mud village (within a girdle wall and gateway which made it virtually into a fortified village) are clear from two sources. One is the associated archaeological material, which seems not to extend beyond the end of the Old Kingdom. The other is a decree of King Pepi II of the Sixth Dynasty, found in the floor debris of the inner gateway. The text of the decree exempts the 'pyramid town' from certain obligations and appoints an official to it. It demonstrates that this site was officially regarded as part of the pyramid town at a date very close to the end of

the Old Kingdom. After this time the site appears to have been abandoned and the cult of King Menkaura to have ceased entirely.

The whole history of this settlement reveals how great could be the gap between intention and practice, between the products of superlative craftsmanship and the way they were treated, and between the inner world of bureaucratic order and the rough reality outside. The two parts of the town, springing from temples for the cults of Khentkawes and Menkaura, began as expressions of imposed architectural order but their subsequent history was shaped by innumerable personal and local interventions which overlaid the original designs with the signatures of self-organization.

Menkaura was not an unusual case. The Valley Temple of King Sneferu of the Fourth Dynasty at Dahshur provides a further illustration (Figure 5.9).[18] Here we see the remains of a limestone temple with finely carved reliefs (including the personified offering-bearers of Figure 4.2, p. 169). It stood within a rectangular enclosure defined by a mud-brick wall, leaving a space on the south side of the temple, 15 × 48 m. This was filled up with the houses of the serving community, so creating another pyramid 'town'. Altogether some 15 houses seem to have been present, offering accommodation for perhaps 100 people if they were occupied by families. As a figure of cult interest, Sneferu enjoyed a lengthy history, seeing a revival in the Middle Kingdom. This seems to have been reflected in a phase of occupation overlying the original Old Kingdom houses. It looks probable that Dahshur also adds an element of wider context missing from other pyramid sites of the Old Kingdom. What are probably the remains of a much larger town have been located beneath the fields to the east of the pyramid.[19] It could be that, as one might guess for other pyramid communities, it was the main settlement of which the 'town' at the actual pyramid temple was a satellite for short-term occupation by the group fulfilling its monthly period of duty.

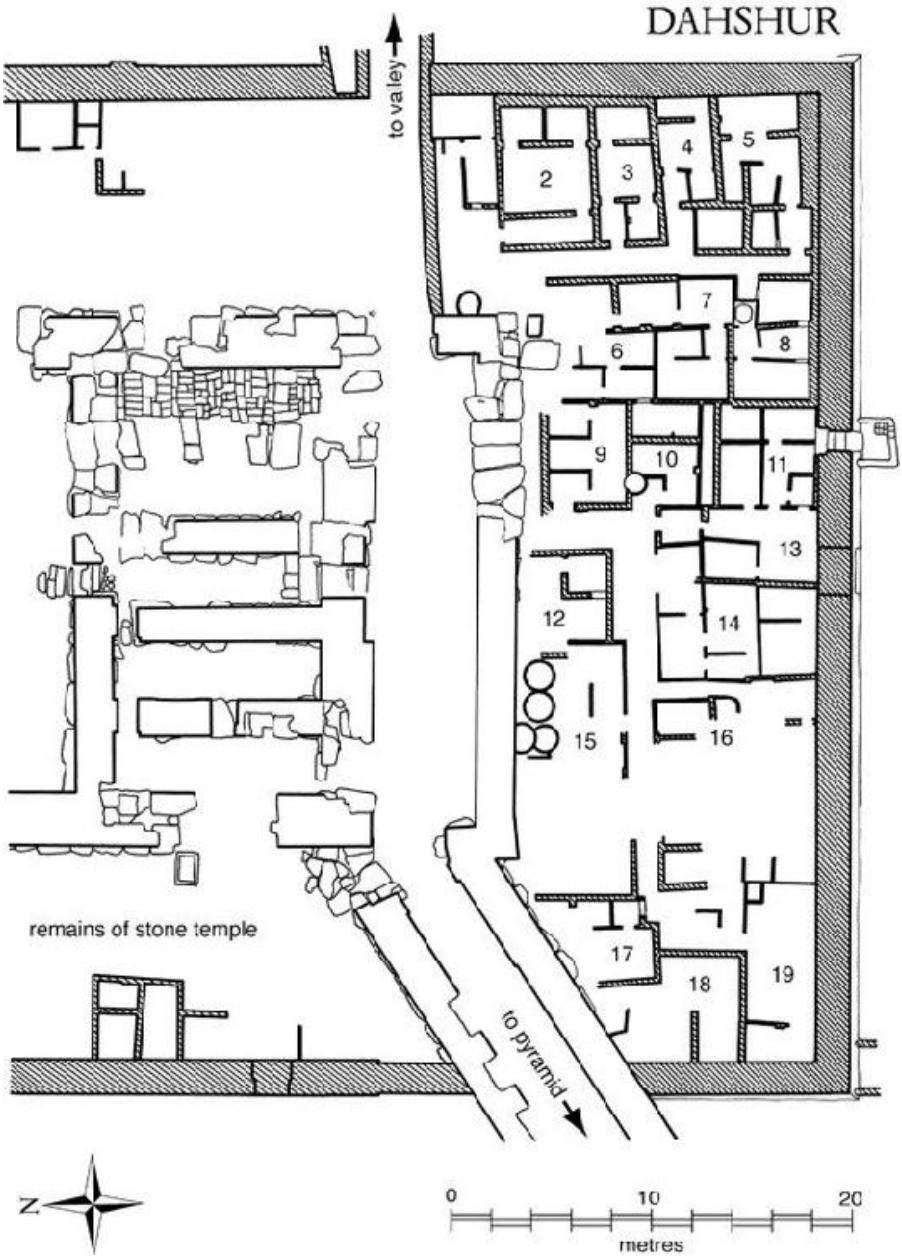


Figure 5.9 The Old Kingdom mortuary-cult 'town' attached to the Valley Temple of Sneferu at Dahshur (see also the reliefs, Figure 4.2, p. 169). Nos 1–11, 13, 14 and 16 are probably houses, no. 15 contains a set of four granaries. After Fakhry, *Dahshur Reliefs*, Fig. 4.

Bureaucracy begins by imposing order on defined areas of activity. The scope of control can grow, however, and become the prime factor in a community's existence. If this is harnessed to a tradition of architectural planning, the 'model town' comes into being. The

available evidence demonstrates that in the Old Kingdom (even possibly in the Early Dynastic Period in view of the strictly planned quarter at Tell el-Faraʾin, Figure 2.13, p. 85) the bringing about of regularity of plan, with straight streets and modular buildings, became a recognized way creating settlements. But the evidence we have for Old Kingdom towns, limited though it is, suggests that the process did not represent a general policy but was something chosen by some agencies close to the king and not by others. It was the Middle Kingdom, which followed the period of provincial assertion, at least in Upper Egypt, of the First Intermediate Period, that for a time made planned settlements the norm.

Planning at its height: the Middle Kingdom town of Kahun

The name Kahun was given in 1889 by Flinders Petrie to a large Middle Kingdom settlement in the vicinity of the modern town of El-Lahun, which stands close to the entrance to the Fayum depression (Figure 5.10).[20] It lies on the rising edge of the desert, and part has been lost to the lateral spreading ofcultivated land since ancient times. The basic nature and purpose of the town are evident from its context. Beside it lay a temple, reduced to a ruin down to its foundations even by Petrie's day, and this, to judge from its position, was the Valley Temple to the pyramid of King Senusret II that stands just over 1 km to the west. No causeway was made linking it to the pyramid, which seems to have remained a monument that, despite its distance, gave meaning to the temple and its town.

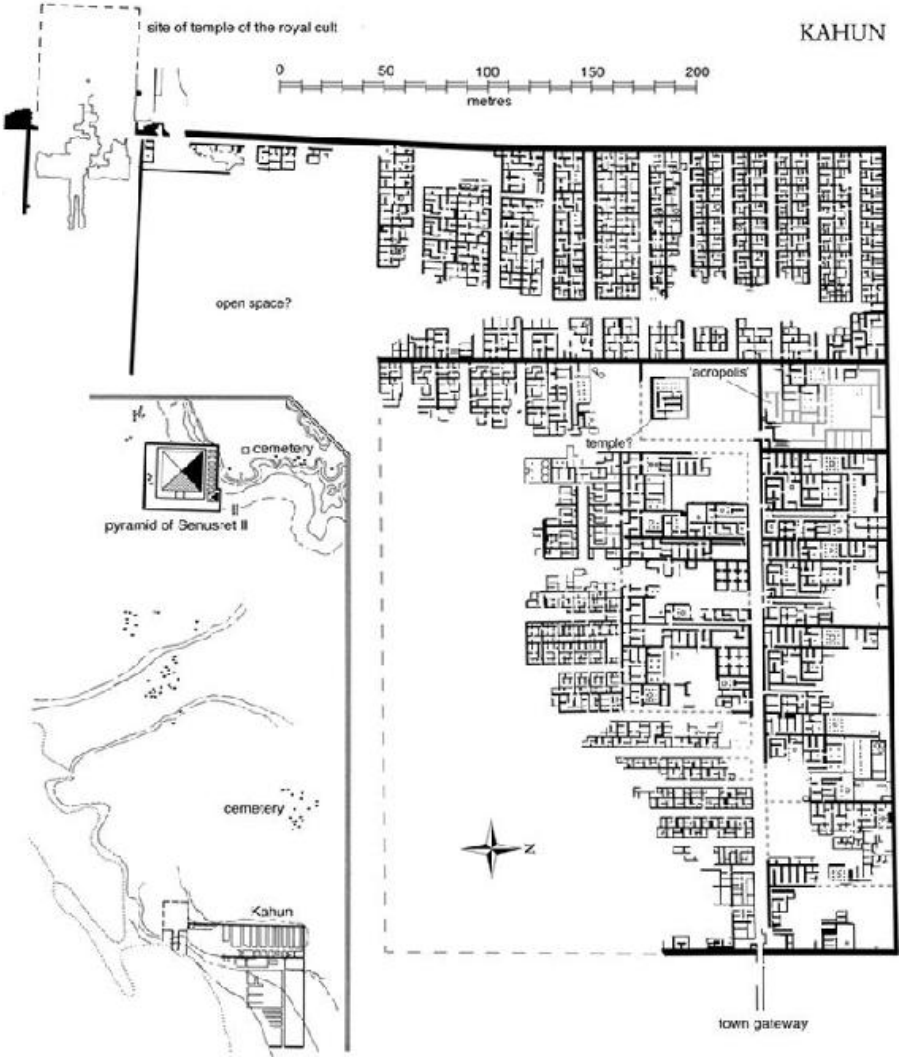


Figure 5.10 The type site for orthogonal town planning in ancient Egypt: the Middle Kingdom town of Kahun, attached to the pyramid of Senusret II. After Petrie, *Illahun*, Pl. XIV; Petrie et al., *Lahun*, Pls II, XXXIII, XXXVIA; additions (in grey) from the work of the Royal Ontario Museum and University of Toronto expedition, as presented in Moeller, *Urbanism*, plans between pp. 272–88.

The town, following the same orientation as the pyramid, is an unusually large example of a 'pyramid town', housing the varied personnel responsible for the perpetual cult of the deceased king. Papyri found in the town confirm this, for they include part of the administrative archive of the mortuary cult. It reveals that, as postulated for Giza after the Fourth Dynasty, a range of mortuary cults from a court cemetery around the king's pyramid had been consolidated into a series of statue cults of members of the royal

family and of officials and their families located within the large stone temple that lay beside the town. The archive also gives us ancient names for the town: Hetep-Senusret ('King Senusret is at peace') and Sekhem-Senusret ('King Senusret is strong'), the latter name perhaps applied to the separate western subdivision of the town.

The size of Kahun is, however, far greater than that of other known pyramid towns, although it has to be admitted that the basis for comparison is small. But on the general scale of ancient urbanism, too, Kahun stands out as an important town in its own right. Its functions may therefore have gone much further than simply housing the workmen who built the pyramid, and the community which kept up the cult of the dead king Senusret II. A good many administrative papyri have come from Kahun, belonging to two main groups, each representing quite separate archives with few points of contact.[21] Only in part is this because they date from different periods within the Middle Kingdom. Much more is it because they reflect two different areas of organized life. One group, already mentioned, derives from the temple of the royal cult and is concerned with temple organization and temple personnel; the other comes from within the town and covers the life and business of a broader community involved not only with the original foundation but also with many unconnected areas of interest. A few documents deal with work located actually outside Kahun altogether, on a construction project of King Amenemhat III, possibly part of his own pyramid complex. The dragging of stone by gangs of men is the subject of several papyri, as is the farming and measuring of land belonging to the staff and estates of the temple. Whether Kahun also contained people who followed their own agricultural pursuits is not known. From these sources, from the size of the town and from its long subsequent history of occupation we can deduce that its purpose, perhaps conceived from the beginning, was to develop into a major source of labour and agricultural produce as well as to continue to serve the needs of the cults of statues in the adjacent stone temple. To some degree Kahun was combining the functions of the Heit el-Ghurab and Khentkawes/Menkaura towns at Giza and with greater longevity.

The town was roughly square, its sides measuring 392 m on the north and an estimated 246 m on the east (thus an area of 9.5 ha). The ground slopes gradually from the south-east corner up towards the north-west corner. A thick wall divides the main part of the town from a separate strip on the west. The reason for this division is not known. The surrounding walls (with a thickness of *c.* 3.25 m) show no

trace of fortification. Only one gateway is preserved, that towards the north-east, measuring about 2 m across. An isolated room just inside the gate may have housed a watchman, but no extra protection at the gateway is visible. Within the walls the town displays a grid or orthogonal plan which the builders adhered to far more strictly than had been the case with the Heit el-Ghurab site at Giza. The north side of the main east–west street is subdivided into seven principal units, with three more on the south side. The westernmost stood on a natural eminence of rock that had been sculpted to form a platform with vertical sides rising above the town on east and south. Petrie called this the Acropolis. The scant traces of walls on the summit imply that it was not dissimilar to the other large units. It was reached, however, by an impressive staircase cut into the rock. The other units seem to have been large houses (Figure 5.11). Most of them measured 42 × 60 m. Where the site has lost its archaeological layer to erosion on the south, there is room to reconstruct both more of the large and more of the small houses.

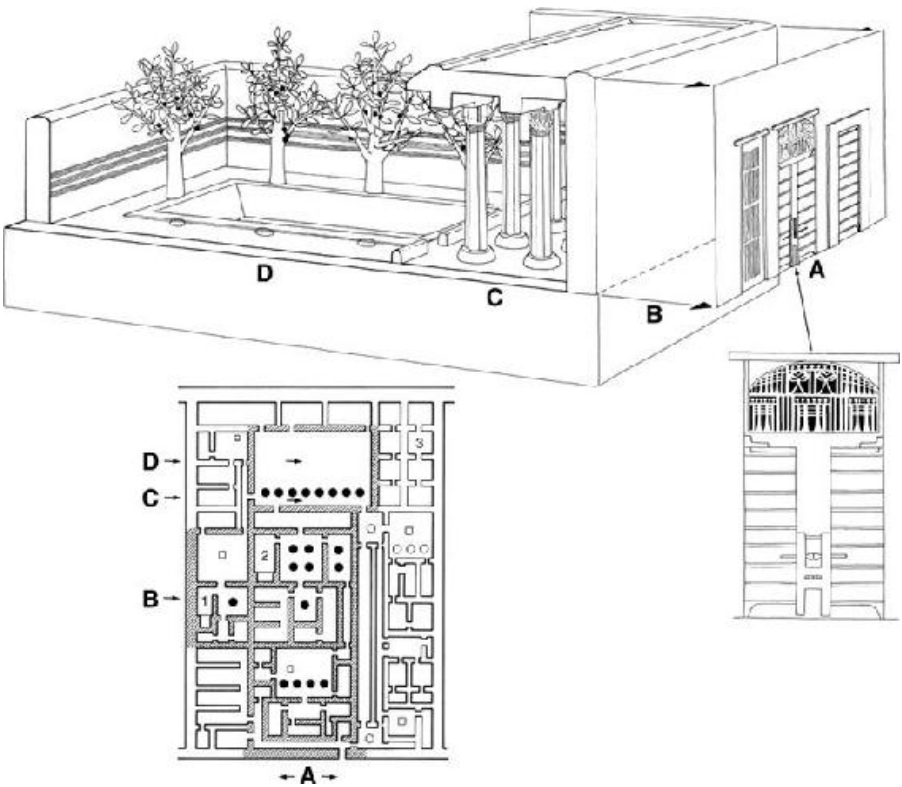


Figure 5.11 Large town houses: the plan is a composite derived from Kahun (Figure 5.10, p. 212). The core house – the residential part – is cross-hatched. Two master bedrooms with bed alcoves can be recognized (nos 1 and 2, see Figure 8.13, p. 351,

for a New Kingdom example). The remainder of the building must be given over to storage (including a granary, no. 3) and workshops. The perspective drawing is derived from the early Twelfth Dynasty house models from the tomb of Meketra at Thebes. The parts A to D correspond to the similarly labelled parts on the plan. 'A' is the façade to the street, 'B' is the core house (reduced to the thickness of the wooden end panel in the model), 'C' is the portico, 'D' is the garden. After Winlock, *Models*, Figs 9–12, 56–7.

As is usual with Egyptian buildings the focus of interest for these large houses is almost exclusively the interior. To judge from the plan, their exteriors seem to have been a continuous blank façade of brickwork broken only by the door spaces. This would have created a stark effect if left entirely devoid of decoration of any kind. Fortunately, we have another source of evidence for what large Middle Kingdom houses actually looked like. These are more or less contemporary wooden models of houses buried in tombs, and particularly the ones from the tomb of Meketra at Thebes, which date to the early Twelfth Dynasty and provided the baking/brewing model illustrated in the last chapter (Figure 4.4 (2), p. 174).[22] The outside of the two models of Meketra's house (Figure 5.11), as well as the inside wall facing the garden, has three rectangular panels. The central contains the main entrance to the house. It has two pivoting door leaves, braced with horizontal struts, and secured by a central bolt. Above it is an ornate design based on the *djed*-hieroglyph, a simplified tree trunk, used in the writing of the word 'stability', with two bunches of water lilies ('lotuses') in the top centre. We cannot tell from the model if this upper part was a carved fanlight, or simply a painted moulding in the mud plaster of the façade. To the right of this on the outside wall is a side entrance, with single pivoting leaf and no surrounding decoration. To the left is another rectangular feature that seems to be a tall, latticed window with narrow openings which would admit air and a dim light, but could presumably be easily sealed during windy spells when much dust blows in the air. We can tentatively add these details to the sides of the Kahun main street and so enliven it a little.

The internal plan of the large Kahun houses is intricate in the way we have already met at the First Dynasty 'palace' at Tell el-Fara'in (Figure 2.13, p. 85).[23] The builder has strictly adhered to an unbroken rectangular outline that he has filled with a dense and complex arrangement of interlocking rectangular spaces, often using a labyrinthine solution to the problem of access. Rectangular modules are all-pervasive, and seem to fit the intensely structured and bureaucratic nature of the Middle Kingdom state as revealed from

many sources. From careful inspection of Petrie's plans, we can recognize several basic subdivisions. The residential part – the house proper – seems to be the central group of rooms and courtyards. In the case of the houses on the north side of the street it was contrived that this group was also entered from the north, via a long passage which ran beside it to a garden court on the north side. A colonnade shaded this northern, inner façade of the house. With the houses on the south side of the street this inner court seems to have been more in the centre of the building. If one extracts this core house plus its garden court and colonnade one has essentially what is represented in the Meketra house models: a house with formal entrances at back and front (reduced in these models to a single thickness of wood), adjacent to a walled garden, the inner façade of the house shaded by a columned portico. The Meketra models add further details which include the colour scheme (Figure 5.11): a central pool surrounded by trees, the garden and portico walls painted with a broad black dado, above which is a frieze of blue, yellow and white bands, topped by a wider white band. In the portico are two rows of four slender wooden columns, carved and painted, which rest on bases painted white to simulate limestone. The rear row of columns is carved in the form of a cluster of papyrus stalks, and the front row in the form of buds of water lilies ('lotuses') bound together with bands of red and blue. The wooden architraves that they support are bespangled with stars, and the wooden ceiling between them is carved to represent palm trunks split in two, painted with stripes of green and red. The portico itself has a flat roof the low front parapet of which is pierced by three rainspouts, painted white to indicate limestone.

Within the Kahun core house a central reception room can be recognized, its roof supported on four columns. Beside it on the west is a small colonnaded court containing a stone tank set centrally in the floor. Petrie's plans also depict locations where the walls of a room were stepped back at the far end to create an alcove. Later evidence shows that alcoves like this were for beds in important bedrooms. If this holds true for Kahun, then one such was located within the central house core, but another was on the west, in what appears to be a residential annexe, with its own court. The possible purpose of this annexe will be returned to shortly.

On three sides, the core house is surrounded by groups of chambers and little courts, comprising parts of an urban estate. For only one group can we identify its function directly from the plan. The group of square interconnecting rooms in the north-east with its courtyard in

front is almost certainly a granary. Identical granaries occur in some of the Nubian forts dealt with later in this chapter. Their presence reflects the commodity-based nature of the Egyptian economy. The Meketra models include a fine granary evidently designed along the lines of those at Kahun. In this the entrance leads to a long vestibule, accommodating models of one doorkeeper, four seated scribes with document boxes, an overseer and his assistant, and three labourers who measure loose grain with a *hekat* measure before filling sacks. A door from the side of the vestibule leads to a room containing a staircase rising to a broad walk along the tops of three square interconnecting chambers where the grain is stored.

The combined capacity of the granaries in the large Kahun houses is very considerable. We can, from Petrie's plans, measure the areas of the various storage chambers. For the height, some of the Nubian forts provide direct evidence: 3.4 m. The Nubian granaries were, however, somewhat larger, so that for Kahun a reduced figure for filled height of 2.5 m can be assumed. How much grain could they hold? Even more important: how many people could they support on the average rations calculated in the last chapter?

Table 5.1 The numbers of annual ration units storable in the granaries using minimum and maximum estimates of ration size

Site	*Capacity of granary (in cubic metres)*	*Minimum annual ration units*	*Maximum annual ration units*
Kahun: N. House	337.50	1,164	675
Kahun: S. house	316.40	1,091	633
Kahun: all large houses	2,636.70	9,092	5,723

Table 5.1 summarizes the estimated capacities of the Kahun granaries. These seem to show that all the Kahun granaries together could hold sufficient grain for a population of 5,000 on maximum rations, and 9,000 on minimum rations, assuming five houses only on the north side with granaries. The latter figure of 9,000 is of the same order of magnitude as the total population for Kahun that has been postulated on other grounds, namely between 8,500 and 10,000.[24] Even the lower figure implies that a significant proportion of the Kahun population was dependent on the large houses for rations. Moreover, as will be argued shortly, these population figures may themselves be too large.

The Kahun granaries are a key piece of evidence for regarding Kahun as a town not only created by administration but also maintained by administration, with much of the population dependent

upon rations held in store by the chief officials. But why several large granaries instead of a single central one? The answer must lie in the social structure of Kahun, which will be looked into shortly.

What of the other parts within the Kahun large houses? The plans themselves and Petrie's notes have little more to tell us directly. But the range of activities that an important Middle Kingdom official might wish to see accommodated around him is provided again by some of the sets of tomb models. Here the Meketra group is particularly informative. We have already considered three so far: two almost identical ones of the main house, and the granary. There are five more building models. One of these is a cattle shed, a second is a butchery, a third is the combined bakery and brewery described in the last chapter (Figure 4.4 (2), p. 174). The remaining models are a weaving shop and a carpentry shed.

Are all of these models together parts of a large house of the Kahun type? Here we need to jump forward in time and bring in for comparison a typical dwelling for a high official from the New Kingdom city of Amarna (Figure 8.13, p. 351). Here we can recognize the various parts more easily. The dwelling consists not only of a residence but also of a granary, separate kitchen that might have an adjacent bakery-brewery, cattle shed, other outbuildings which we know in some cases were used for craft production (including textiles), and frequently also a subsidiary house. Who lived in the latter is less certain. As a guess we might see it as intended for the eldest son who would gradually be taking over his father's responsibilities, but it must be admitted that other types of occupant can also be proposed: servants or a steward. All of these parts were arranged informally and rather loosely within a walled compound, with the house usually towards the centre. At Amarna, the hand of the planner was given only limited scope. In particular, it did not extend to laying out the residential areas, which seem to be the relaxed product of individual preferences within prescribed limits, a classic demonstration of the power of self-organization. However, if we try to imagine the ancient planner, faced with the task of laying out a compound containing the Amarna elements, we would find him quite likely producing a tightly organized scheme of interlocking rectangular rooms and spaces: the very kind we find at Kahun. The large Kahun houses are best understood as planned and geometrically more elegant versions of the Amarna estates, containing a series of units that the Meketra models represent, for convenience, as single structures.

The contrast between Amarna and Kahun large houses tells us

something important about the two different societies. At Amarna, household and services have been separately perceived, the services belonging to the perimeter of an enclosure in which the house stands as a central isolated feature. The variety of layout and size of compounds also reflects a society with a broad range of personal wealth and status. At Kahun, household and services have been indivisibly regarded as parts of a formally constituted unit. Nor is there much of a social gradient. As a model community it recognizes two main groups of people: owners of big and owners of small houses. The whole reflects the prevailing mentality of the Middle Kingdom, which tended towards an extreme structured view of society, partly reflected in an inclination to devise arithmetic calculations for every facet of economic life, and to seek to control human behaviour and property by means of a strict bureaucratic framework. Amarna reflects a subtly graded society, whereas Kahun reflects a society of distinct levels.

The Meketra models and the large Kahun houses give the impression that they were of only a single storey. Upper storeys are a perennial problem in archaeology where it is rare for walls to stand to sufficient height to provide a clear answer. Even the presence of a staircase is not proof since it could have led to no more than a flat roof. The problem recurs at Amarna although there a solution in favour of more than one storey draws much of its support from artistic evidence. Some models of the Middle Kingdom also show a second storey (Figure 5.12). These belong to a category of baked clay 'soul houses' which combined house model with tray of model food offerings for the dead. We do not yet have sufficient evidence to judge whether the prototypes stood in towns or were countryside villas.

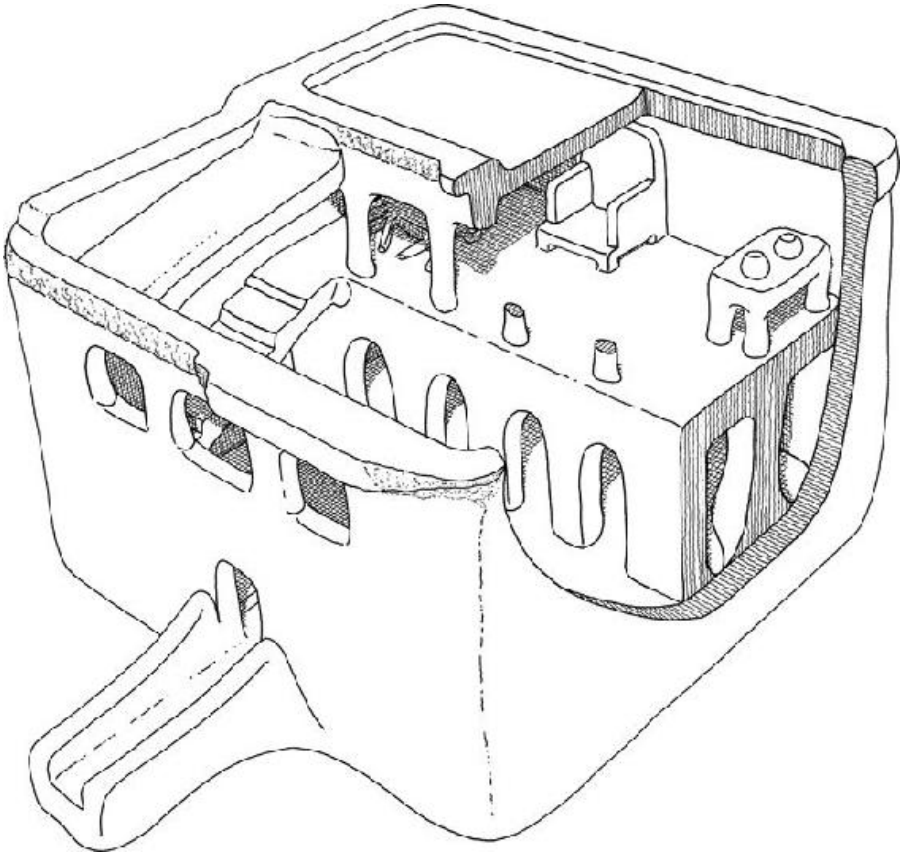


*Figure 5.12*A pottery offering-tray modelled as a multi-storey house. (The modern term for these objects is 'soul house', and the model was designed to have water poured over it which flows out through the front door.) Does the building represent a grander town house or a country villa? Note how the upper floor, reached by an external staircase with its own roof, is the more important, signalled by the presence of the formal seat accompanied by a table and also (this being an offering-tray) the carcass of a slaughtered ox (largely hidden from view in this drawing). The high enclosure wall around the court is itself pierced with windows at the front to ensure the maximum benefit to the upper floor from the breezes. The rounded arches of the lower arcade (which fronts a columned hall) could be either a rendering of actual brick arches on the real prototype or a consequence of making the model in slabs of wet clay. The model is in the Egyptian Museum, Cairo, and is illustrated in E. Baldwin Smith, *Egyptian Architecture as Cultural Expression*, New York and London, Appleton-Century, 1938, 200, Pl. LXV.1. The drawing used here is a sketch, only approximately scaled.

A good part of the remainder of the interior of Kahun is occupied by small houses built in rows, frequently back to back. Somewhere in the region of 220 are present on Petrie's plan, a ratio of 1:20 with the large houses. Recent reconsideration of the plan of Kahun has suggested that it was rectangular rather than square, with a reduced dimension from north to south, and that a few of the larger houses

perhaps reappeared along the southern edge.[25] The number of houses offers the safest guide to estimating the original population. Even if we assume that three-quarters of the original houses are included in Petrie's plan, and allow, say, six persons per house, we reach a total population of just short of 2,000, well below the figure of up to 10,000 suggested on other grounds.[26]

The interior arrangements of rooms in the small houses vary considerably. To some extent this may reflect changes brought about over time by occupants in response to changing individual circumstances (as happened in the Khentkawes town, p. 207). They also show the same complex inner articulation of rooms as is present in the larger Kahun houses (an example is included in Figure 5.13). Characteristically an entrance passage leads to a room which, whilst not conspicuously large, nevertheless acted as a pivotal point within the house, in that several doorways lead from it, frequently to anterooms rather than to terminal chambers. Anterooms sometimes deliberately lengthen journeys, placing security or privacy above convenience. In a few cases it looks as though two or more houses have been knocked together to form a larger house, and columns have been inserted. Examples lie in the west sector, eighth block from the north. In several houses circles are marked on Petrie's small-scale plan. Smaller ones seem usually to be column bases, which according to Petrie supported octagonal wooden columns *c*. 25 cm in diameter. In his brief published notes on the architecture Petrie himself describes granaries, circular brick structures measuring between 1.70 and 1.93 m across, plastered inside and out. They seem mostly to have occurred singly, but one pair is present. In the western block of houses, from a total of about 150 houses, 13 contain circles large enough to have been granaries. These would have augmented the grain storage capacity of the town, but their relative infrequency amongst the smaller houses points to significant differences in the wealth of the inhabitants of Kahun.

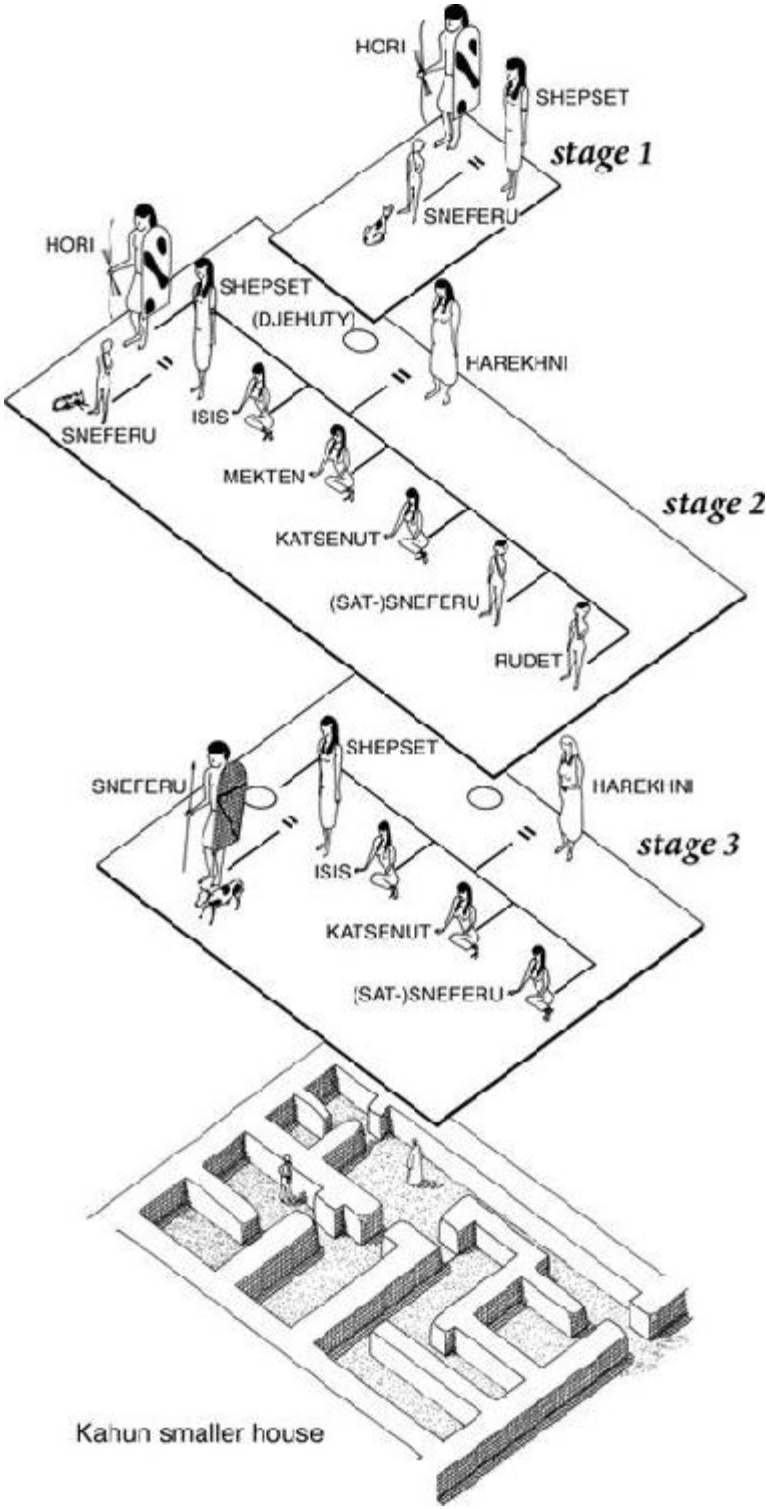


*Figure 5.13*The changing size of a Kahun household, belonging to a soldier and his family. From a papyrus archive from the site. The timespan is not known but is

probably fairly short. It is presumed that they lived in one of the ordinary houses, as illustrated.

One further building inside Kahun deserves notice. It lies immediately south of the Acropolis. It looks as though it stood in an open space. It may have been an administrative and storage building, but a temple is another possibility. Papyri from Kahun often mention the staff of a cult of the god 'Sepdu, Lord of the East' (the bright star Sirius) and it is tempting to locate them in a separate temple within the town. To the south of this building is another which does not resemble either the large or small residences and may, for this reason, have been administrative, whilst across the street to the east lay a court containing three medium-sized circular granaries.

Papyri found at Kahun deal with many aspects of the town's organization and again reveal the extent to which the scribal class felt that whatever they supervised needed to be documented in a manner that others could check. So the mortuary temple maintained a day-book into which letters to and from the mayor were copied, in one case an order that a piece of leather be given to a shoe-maker sent over from the mayor. The papyri are a guide – albeit a very fragmentary one – to the kind of people whom we must put into the large and small houses if we wish to convert an archaeologist's plan into something more like its original living reality.

We can, without difficulty, identify a small number of important officials. The town had a 'mayor' (*hatyʾa*), the normal head of an ancient Egyptian town, who himself had a 'deputy'. It also possessed an 'office of the vizier', where legal proceedings took place and oaths were made, and where the vizier himself was sometimes present. We must exclude him as a permanent resident, however. He was a peripatetic figure, based at the capital. An office of the administrative subdivision called the 'area of the northern district' (*waʾret*) was located somewhere, as also was an office for another senior government official, the 'reporter' (*wehemu*). In the latter, trials could take place. The town's population was caught in the system of labour conscription and so the town possessed a 'compound' where people could, if necessary, be held under restraint.[27] One text is a census-like household list that deals with a priest of the official mortuary cult of King Senusret II.[28] His name was Khakaura-Sneferu. Of his own family one son and daughter are listed. But they are followed by groups of 'serfs' from various sources. These included the ones which evidently came with the office of priest, and numbered 13; a group of three

given him by another official; and a group of unknown number (but a minimum of five) evidently inherited from the sister of his father. The most striking fact about these serfs is that most are female, and many are children of serfs. Just how extensive this list was is not known because the end of the papyrus is lost; but a document from the same period dealing with the serfs of an official at Thebes (probably the vizier Ankhu) listed originally 95 (see Chapter 1, pp. 30–1), over half of them Asiatics, and with women outnumbering men by about two to one.[29] The men bear titles like 'domestic servant', 'field labourer', 'brewer', 'cook', 'tutor' or 'guardian', and 'sandal-maker'. Most of the women whose profession is listed are cloth-makers, but a 'hairdresser' and 'gardener' are also included. The Kahun list presumably belonged to one of the wealthier of the Kahun inhabitants, one of those who lived in the large residences in the north of the town. If we convert the Meketra models into the units of one of these residences, the 'serf' list presumably covers the figures who fill many of the models with industrious labour, though they need not have actually lived on the premises.

The dependence of many people upon the large residences is also to be read into the enormous provision for storing grain within each of them. A significant proportion of Kahun's population must have belonged to redistributive sub-centres in the form of the large residences. This in turn reflects a basic modular organization of society. Instead of all being dependent upon a single large granary with a single administration of rations, the population was broken down in this respect into several distinct groups. This team- or gang-organization of dependent populations seems to have been common in ancient Egypt. The temple phyle-groups encountered in the Neferirkara archive and the 'crews' of men who worked at the pyramid sites are examples; so Kahun, too, followed this model for the organization of the people who staffed the mortuary temple, whose names and ranks were duly entered into the day-book of the temple when their month-long period of service commenced. Even the dancers and singers needed for festivals were grouped according to their phyle.[30] Indeed, one might speculate that the guild-like structure of the temple phyle is the very one around which life at Kahun was organized.

Apart from 'serfs' Kahun housed soldiers and their scribes, and temple personnel including doorkeepers and foreign singers and dancers of both sexes. Three more census lists have survived, found rolled up together. They list the members of the household of two

soldiers, father (Hori) and son (Sneferu) over an unstated period of time (Figure 5.13, p. 220).[31] The father's household consisted initially of himself, a wife and son (Sneferu); later they are joined by his mother, and five female relatives, who seem to be the householder's sisters, bringing the total to nine. When the son inherited, the final list was drawn up, and the household then consisted of just himself, his mother, his paternal grandmother, and three of his father's sisters. It is tempting to regard this as the household of an occupant of one of the small houses. It reveals a second tier of dependence, within the small households, a tier that changed with individual family histories: early decease of wife, marriage of sister and so on. The fluctuation in the size of the household, from three to nine to six, as in other sources cautions against seeking an average household size that can be used for larger populations estimates.[32] Other papyri document the legal affairs of the Kahun inhabitants, as they disposed of property 'in town and country' and wrestled with problems of debt, in all cases revealing that their dependence upon the state was only partial.[33]

The variety apparent in Kahun society points to the central problem of all planning, in the past as now: matching reality to an abstract model of society.

> Officials of the modern state are, of necessity, at least one step – and often several steps – removed from the society they are charged with governing. They assess the life of their society by a series of typifications that are always some distance from the full reality these abstractions are meant to capture.[34]

Kahun was laid out by someone who saw only two social levels: top bureaucrats and others. In reality the latter was a diverse category with varied needs and expectations, exemplified by the changing size of the Hori–Sneferu household. The simple twofold division represented a social myth held by the elite. It made no serious attempt to cope with the social and economic differentials within the numerous body of people with an 'official' capacity of one lesser kind or another. After the Middle Kingdom the state gave up the idea of planning for communities other than small groups of workmen. The city of Amarna (Chapter 8) will illustrate this vividly.

Urban renewal and colonization

Kahun provides a classic example of the application of bureaucracy to

community creation on the scale of a complete town of no mean size by ancient standards. Although the rest of the evidence from Middle Kingdom Egypt is very patchy, it is sufficient to suggest that Kahun illustrates a general preference for rigid large-scale layout of residential and administrative quarters. Furthermore, from the spread of examples we can begin to conclude that the Middle Kingdom state embarked upon an extensive programme of remodelling communities in this regimented fashion. One example – of an integrated temple, storage, administrative and probably residential unit of the Middle Kingdom at Medamud – was briefly illustrated in Chapter 3 (Figure 3.12, p. 136). More sites will now be chosen to spread the picture further, and they will then be considered as aspects of a common policy.

The first is closely comparable to Kahun but lay far from the pyramids, in the heart of Upper Egypt, near the site of Abydos. A small number of kings in the Middle and New Kingdoms went to the trouble and expense of creating special establishments to maintain a cult of themselves on ground dedicated to the god Osiris whose own tomb was by this time thought to be located there. At a distance of 4 km from the then existing town of Abydos, where the temple of Osiris lay, King Senusret III constructed a huge replica tomb accompanied by a temple, and a full-scale new town to go with it. Named Wahsut-Khakaura ('Enduring are the places of Khakaura' (Senusret III)), only the rear part has survived to be excavated (Figure 5.14). It consisted of perhaps 16 large houses and one even larger (rather like one of the Kahun mansions) which belonged to the 'mayor' of the town, several generations of the office holder having been identified.[35] If there were streets of small houses, as at Kahun, they have been lost beneath modern fields and village houses.

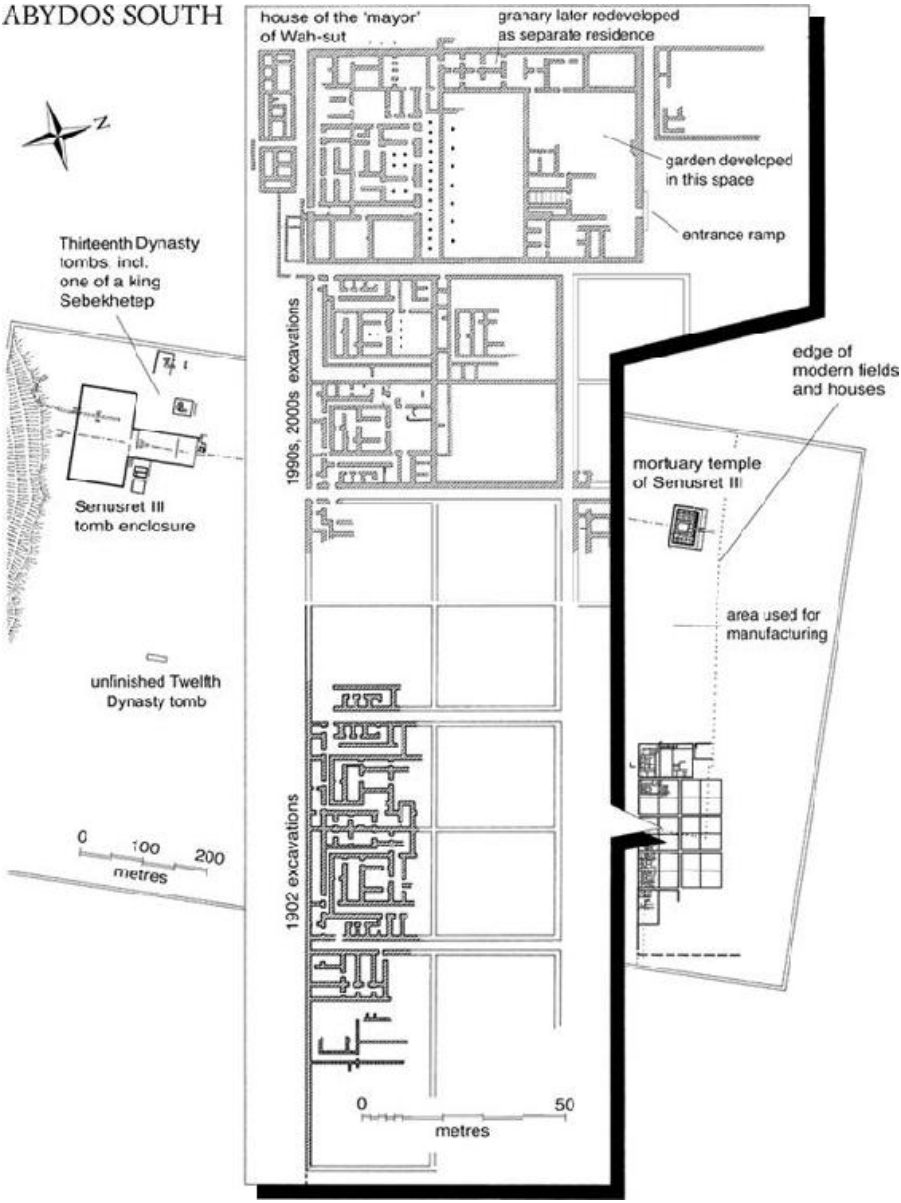


Figure 5.14 The model town of Wahsut, built as part of Senusret III's tomb complex at South Abydos. After J. Wegner, *MDAIK* 57 (2001), 283–4, Figs 1, 2; Moeller, *Urbanism*, 292–3, Figs 8.30, 8.31.

The geographical spread of planned settlements is well illustrated by Tell el-Dabʾa, in the north-eastern Nile delta, where the river floodplain peters out amidst low sand hills and, beyond them, lagoons and the Mediterranean coast. As the map shows (Figure 5.15), settlement began in the later part of the Predynastic Period and was well advanced by the end of the Old Kingdom, reflecting both the

proximity of the area to land and sea routes to the Near East, and probably the propensity of farming populations to colonize suitable land even when somewhat marginal. Early in the Eleventh Dynasty a planned town appeared in a place where so far nothing earlier has been detected.[36] Most of what has been revealed comprises streets of small unit houses, mostly arranged back to back and inside an enclosure wall. However, in the north-east corner one set of foundations points to a significantly larger building. Whereas Kahun seems to have maintained much of its plan intact for a long time, here, within a short time, modification to the neat original layout began as people converted the barracks-like dwellings into houses more amenable to personal circumstances. After an occupation estimated to have been no more than 60 years the whole settlement was abandoned (early Twelfth Dynasty). By this time it had become one part of a much larger area of settlement which developed into the leading city of the region (Avaris). Abandonment in this context may have been part of a peaceful process of redevelopment rather than the result of dramatic events.

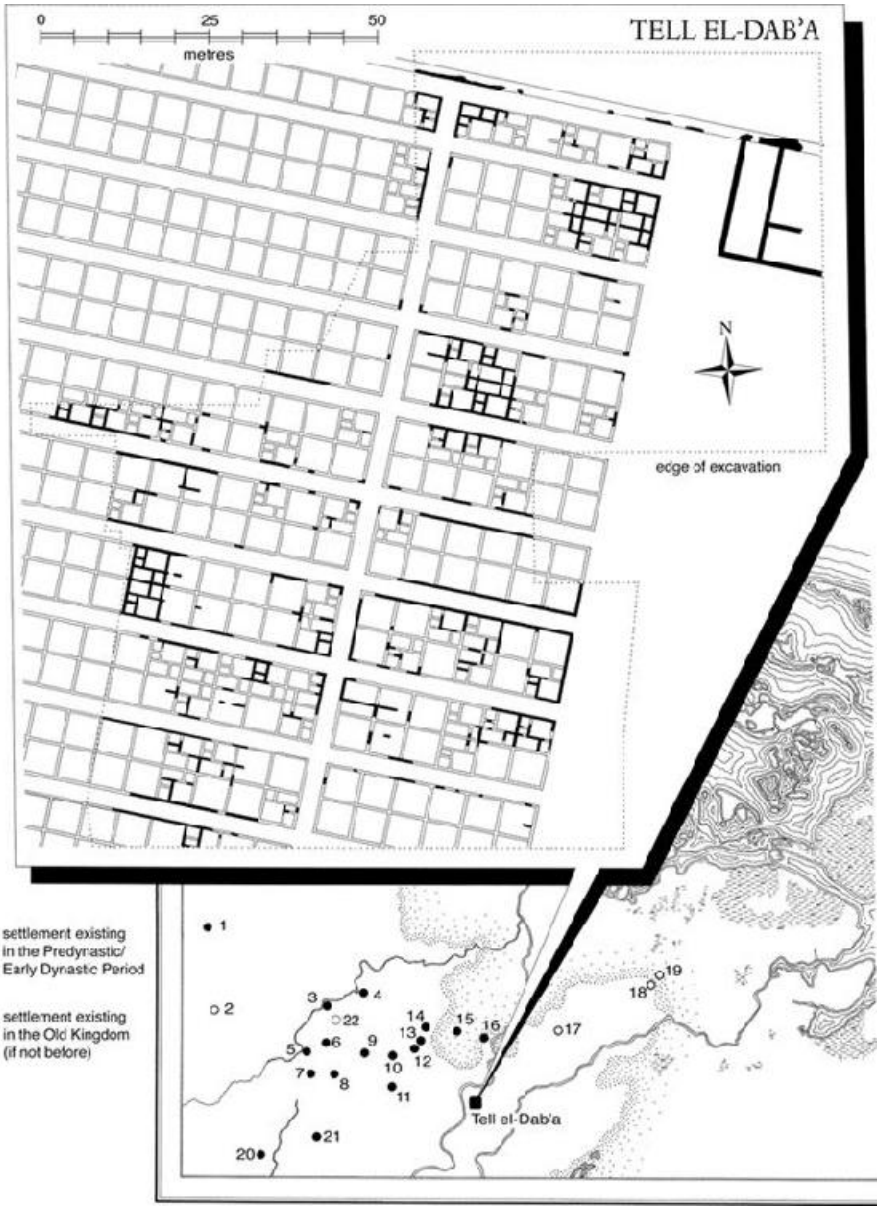


*Figure 5.15*Internal colonization: the earliest level at site F/I at the north-eastern delta site of Tell el-Dabʾa, dating to the early Twelfth Dynasty. After Czerny, *Tell el-Dabʾa* IX, 18, Abb. 2. It is superimposed on a map of the area (the topography is that of the 1920s) showing sites which had already been settled by this time. The details derive from L. Krzyżaniak, 'Recent archaeological evidence on the earliest settlement in the eastern Nile Delta.' In L. Krzyżaniak and M. Kobusiewicz, eds, *Late Prehistory of the Nile Basin and the Sahara*, Poznań, Poznań Archaeological Museum, 1989, 267–85; E.C.M. van den Brink, 'The Amsterdam University Survey Expedition to the Northeastern Nile Delta (1984–1986).' In E.C.M. van den Brink, ed. *The Archaeology of the Nile Delta; Problems and Priorities*, Amsterdam, Netherlands Foundation for Archaeological Research in Egypt, 1988, 65–110, esp. 65–76; also K. Kroeper and D. Wildung, *Minshat Abu Omar: Münchner Ostdelta-Expedition. Vorbericht 1978–1984*,

Munich, Staatliche Sammlung Ägyptische Kunst, 1985, 5, Abb. 1. The uneven distribution of settlements could, in part, be the result of the uneven intensity of modern archaeological survey.

Key to site numbers: 1 Tell el-Rubʾa (Mendes); 2 Tell Samara; 3 Tell Umm el-Zaiyat; 4 Tell Geziret el-Faras; 5 Geziret Sangaha; 6 Tell el-Genidba; 7 Tell Abu Dawud; 8 Tilul Mohammed Abu Hasan; 9 Tell el-Marra; 10 Tell el-Akhdar; 11 Tell el-Dirdir; 12 Tell el-Abbasiya; 13 Tell el-Iswid (S); 14 Tell el-Iswid (N); 15 Tell Umm ʾAgram; 16 Tell Ibrahim Awad; 17 El-Husseiniya (part of Nebesheh); 18 Minshat Abu Omar; 19 Tell el-Ginn; 20 Kufur Nigm; 21 Tell el-Khasna; 22 Tell el-Farkha.

One possible point of modern comparison concerns an institution that spread across the countryside of Egypt in the nineteenth century AD and is still commemorated in a host of village names: the *ezba*. This was a settlement provided by a land-owner for his labourers. Some *ezba*s were perfect examples of rectilinear planning applied to the provision of tiny uniform dwellings within a walled compound, which bear a close resemblance to some ancient examples, especially that at Tell el-Dabʾa.[37] The parallel misses, however, the element of relative scale. *Ezba*s in modern Egypt remained small and rural. They were not towns, whereas by the scale of the times the planned Middle Kingdom settlements, including that of Tell el-Dabʾa, often were. They represent a more widely applied remodelling of society.

The final example from within Egypt is the city of Thebes. The most ancient city mound is nothing less than the ground on which the Karnak temple complex of the New Kingdom stands (Figure 6.8, p. 264). Indeed, it seems to have spread well beyond the limits of the later Karnak enclosure wall. The highest point seems to have been the site of the Middle Kingdom temple of Amun which was a natural elevation in the floodplain. Figure 5.16 marks nine locations where excavations beneath the floor levels of the New Kingdom temple complex have found walls and debris (mostly potsherds) from various phases dating between the First and Second Intermediate Periods.[38] The exposures are often not over an extensive area. The largest and clearest was made in 1970–1 to the east of the sacred lake, behind the modern seating tiers for the sound-and-light show at Karnak (Figures 5.16 (1) and 5.17). The edge of the lake is on the west. The wall with towers that divides the excavation is part of the Eighteenth Dynasty temple enclosure wall. The walls to the east, however, are at a lower level, and run on beneath the wall and buildings on the west. They have a somewhat different orientation. Although only a fragment of plan is visible, it belongs to a settlement with buildings of markedly different degrees of solidity of construction. All, however, conform to

a single grid plan. A 5m-thick enclosure wall crosses the site from west to east almost in the middle. On its south, and separated by a street, is a fragment of what seems to be another example of a large, rectangular, intricately planned building, with columns, for which the term ‘palace’ is probably not inappropriate. The edge of another smaller one lies at the northern edge of the excavation. If this section is at all typical, Middle Kingdom Thebes may have resembled a larger and internally more varied version of Kahun.

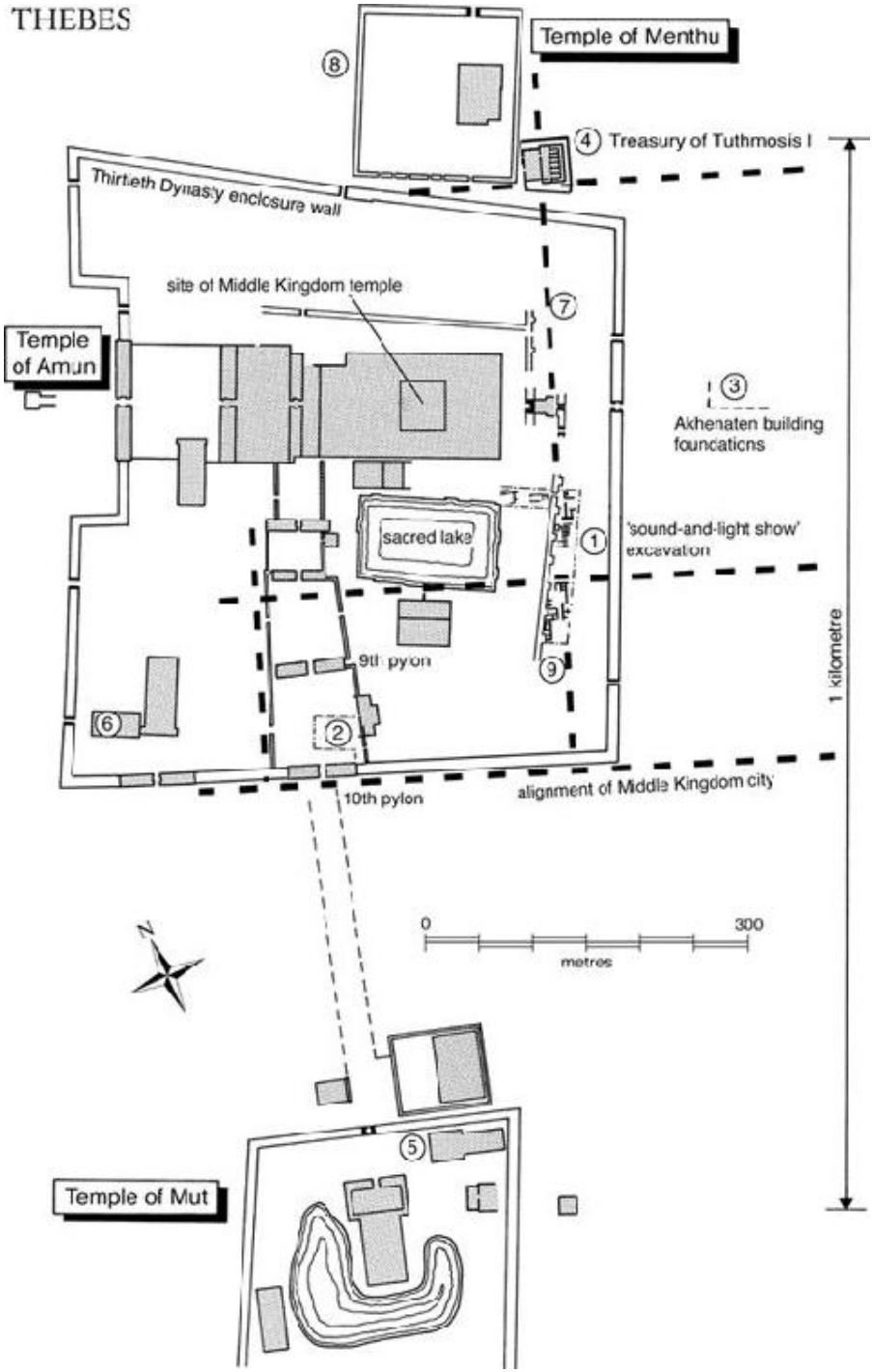


*Figure 5.16*Planning at a prestige location: the ancient city of Thebes. Outline plan of the New Kingdom temple complex (its main components shaded grey), showing nine exposures of the pre-New Kingdom city. Compare Moeller, *Urbanism*, 303, Fig. 8.38.

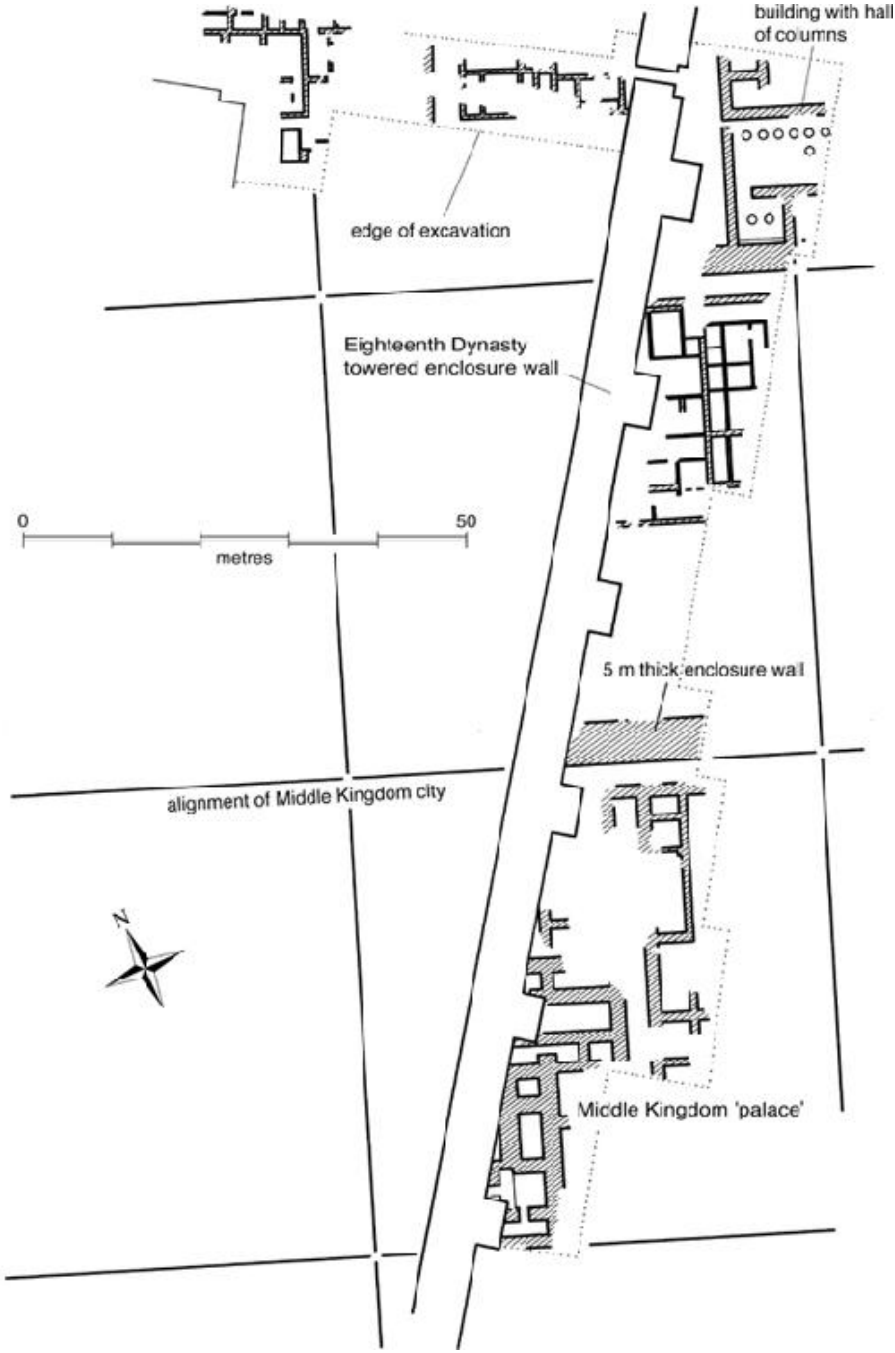


*Figure 5.17*Detail of exposure no. 1 of Figure 5.16, part of the orthogonally planned Middle Kingdom city, after J. Lauffray, Ramadan Sa'ad and S. Sauneron, *CdK* 5 (1975), 26, Fig. 13.

Another exposure (Figure 5.16 (2)), actually outside the Thirtieth Dynasty enclosure wall to the east, was beneath the floor level of a

badly damaged building of Akhenaten. It revealed town debris of the Middle Kingdom and Second Intermediate Period, but also included a length of enclosure wall, 6 m wide, running true north–south. At this thickness, we can conclude that it was probably part of the city enclosure wall. Again outside the Thirtieth Dynasty wall, but this time on the north, the foundations of a stone building have been excavated which is aligned not to the main New Kingdom temple but to the general trend of the earlier walls exposed to the east of the sacred lake (Figure 5.16 (4)). The building itself is identified by contemporary texts as a 'Treasury' of Tuthmosis I of the Eighteenth Dynasty, but test pits beneath the floor have encountered walls and pottery of the Second Intermediate Period, whilst outside the building similar earlier material occurs at a level higher than the 'Treasury' floor. This suggests that the New Kingdom Treasury was built in a slight pit in the debris of the abandoned older city, and that the sides of the pit preserved the outlines of a plot of ground defined by the old city's general street alignment.

These exposures derive from a city at least 1 km long. Only exposure no. 1 gives us an intelligible plan of any size, so that we cannot judge whether the whole of Thebes at this time was turned into agiant version of Kahun, or only a part of it. We can suspect, however, that, in the manner of some mediaeval European cities that retained outlines of the street plans of their classical predecessors, some of the New Kingdom and later alignments at Karnak reflect those of earlier times. Some of these are marked on Figure 5.16, but the true extent of this will only come from future excavations. We are already entitled, however, to consider Thebes as a major example of a Middle Kingdom planned city.

The limits that the drive for planning reached are represented by a stark scheme for human management at an isolated site, Qasr el-Sagha, on the north-western edge of the Fayum.[39] Here a rectangular brick settlement was constructed, its sides aligned to the compass points (Figure 5.18). It seems to have provided 150 identical rooms arranged in groups of five, but we have no way of knowing whether each room was for one occupant or for several. The settlement was part of a spread of remains of the Middle Kingdom which included an undecorated stone temple, a cemetery and a more informally laid-out settlement, all located not far from the then shoreline of the lake which filled a good part of the Fayum. Much further away, to the north-west, lies a major source of basalt. It seems not to have been exploited in the Middle Kingdom, however, so that another

explanation is required for this Middle Kingdom phase of activity. There are good reasons for thinking that the drop in the level of the lake which followed the end of the Old Kingdom would have exposed large tracts of cultivable land in the Fayum depression. Qasr el-Sagha could have been one of probably several schemes to import labour into the area which could assist in establishing permanent agriculture.

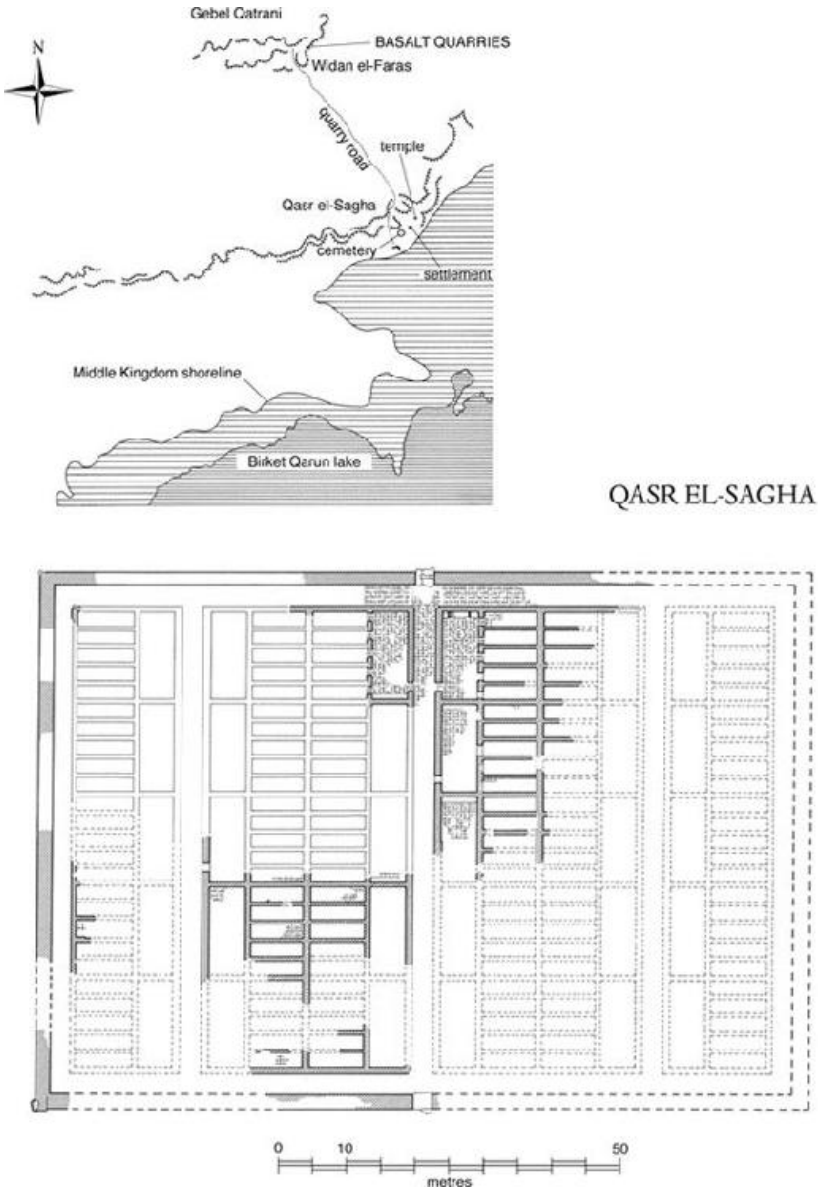


*Figure 5.18*Planning applied to a probable labour camp: the settlement at Qasr el-Sagha, northern Fayum. After J. Śliwa, *MDAIK* 48 (1992), 179, Abb. 1; also Arnold, *Qasr el-Sagha*, 26, Abb. 14. The inset map, which also shows the greatly increased size of the Birket Qarun lake in the Middle Kingdom, is after Arnold, *Qasr el-Sagha*,

24, Abb. 13.

The use of settlement creation (and the administration which would, in the Middle Kingdom, inevitably accompany it) as a means of asserting political control of land provides a suitable introduction to the major example of this from ancient Egypt: the Middle Kingdom in Nubia.

The Nubian forts

The experience gained in building pyramids, creating towns and dispatching quarry expeditions to distant regions found a new outlet in the Middle Kingdom: logistics for conquest. Important lessons had been learned. Valour, savagery and successful tactics on the battlefield were less certain if soldiers and commanders were not adequately provided for, and victory had little point if it could not be backed up by permanent control. Fighting in Nubia became only the sharp tip of a huge bureaucratic thrust. Empire-building now involved two very different sets of people, scribes and soldiers.

The Egyptian conquest of Nubia had begun in the First Dynasty.[40] In the Old Kingdom the Egyptians took the first steps towards settlement in Nubia. This reflected the attitude that was to become much more marked in later periods, that Nubia was a quasi-province of the Egyptian state. A fragment of an Old Kingdom town at Buhen North is the only site of this earliest phase known from excavation, but a few Old Kingdom sherds from Kubban further north may be a sign that Buhen was not alone at this time. Following the civil war of the First Intermediate Period, the reconquest of Lower Nubia seems to have got under way rapidly, in the reign of the victor of the civil war, King Nebhepetra Menthuhetep II. A further campaign of conquest in year 29 of King Amenemhat I, first king of the Twelfth Dynasty, is recorded in a graffito within the heartland of Lower Nubia. The building policy which was well advanced in the reign of his successor, King Senusret I, is itself evidence of a massive kind that Lower Nubia had been thoroughly subdued. The powerfully bureaucratic attitude that seems to characterize the Middle Kingdom was now directed towards Lower Nubia, and to a renewed phase of settlement creation. This had produced, by the end of the Twelfth Dynasty, a line of forts and of fortified towns, regularly spaced along the 400 km between the First Cataract and Semna at the head of the Second Cataract. Although these constructions reflect specialized local considerations, they also have much to tell us about the scale of Middle Kingdom

administration and its determination to create a desired environment in the face of considerable difficulties.

The Nubian forts fall roughly into two groups, representing partly two different types of terrain and partly two major building phases. At some sites, moreover, forts built in the first phase saw major modifications and enlargements, representing probably the initiatives of the local communities active during a period of more than two centuries.

The first group of forts may be termed the 'plains type'. They were constructed on the flat or shelving banks of the Nile north of the Second Cataract. They were the largest forts built in Nubia, and with their citadels and the even larger areas within an outer perimeter wall they could have accommodated many activities and housed a numerous human and animal population. The fort of Buhen towards the southern limit of this zone provides the type site (Figure 5.19).[41] Inscriptions show that it was in existence by year 5 of King Senusret I's reign. It lay on the desert as it sloped gently down to the river, without significant cultivation in the vicinity. The indigenous population of both ancient and modern times was concentrated on the opposite and far more fertile eastern river bank. Two concentric fortification lines enclosed an inner citadel and an outer area.

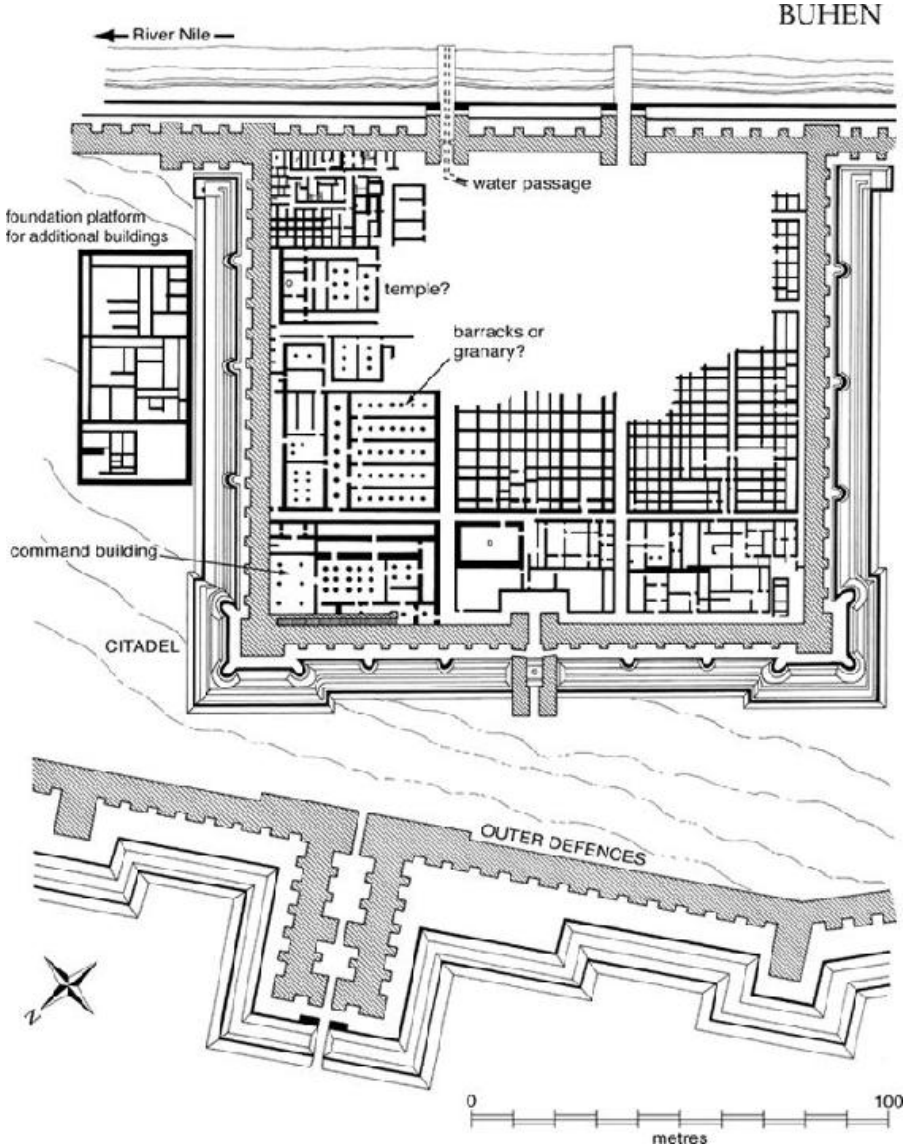


*Figure 5.19*Planning in the service of the military: the Middle Kingdom fortress of Buhen in Nubia. The cellular pattern represents foundations; at ground level there would have been more doorways. After Emery et al., *Buhen*, Pl. 3.

The citadel measured approximately 150 × 138 m, and was defined by a mud-brick enclosure wall 5 m thick, with external towers. One standing fragment provided an original height of between 8 and 9 m. The river frontage was further protected by two spur walls that prolonged the eastern wall to north and south. Two gates gave access to the waterfront. Beneath the northern one ran a stone-lined passage intended to ensure a safe water supply in time of siege. A

single massive gateway on the west, protected by two projecting parallel walls, provided access to the desert side. No direct traces were found of how the upper parts of the wall were shielded, but pictures of forts in contemporary tombs show that crenellations were normal.

The base of the wall was protected not only by a ditch, but also by a narrow, brick-paved rampart with its own parapet wall (Figure 5.20 (1)). This was pierced by loopholes in groups of three, intended for the use of archers. At intervals, and at the corners, the rampart and lower parapet widened to form semi-circular towers, provided with a second set of loopholes. The preserved loopholes on the west pointed down into the ditch, but on the northern and perhaps southern sides an upper row pointed directly forwards. North and south sides differed also in that a special kneeling-step running along the base of the wall for archers was added as well. As for the ditch, it was dry, cut into the rock, and had average dimensions of 7.3 m in width and 3.1 m in depth. A counterscarp had been built up on the outer lip of the ditch to support a glacis.

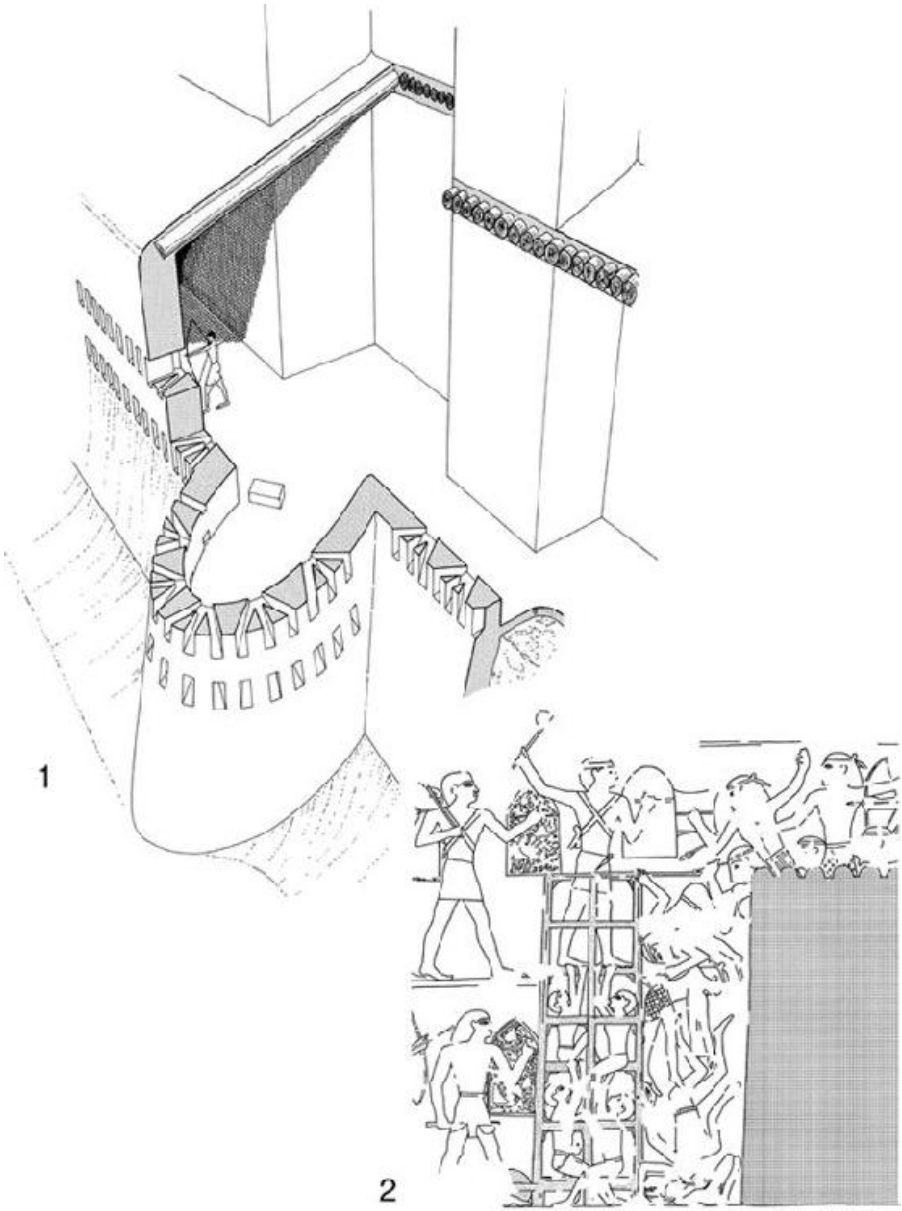


*Figure 5.20*The ingenious mind of the military engineer. (1) Reconstruction of the fortifications of the citadel at Buhen; see Figure 5.19, p. 229. (2) Wheeled siege tower in use in the First Intermediate Period, from the tomb of Intef (no. 386 at Thebes). After D. Arnold and J. Settgast, *MDAIK* 20 (1965), Abb. 2, opposite p. 50; also B. Jaroš-Deckert, *Das Grab des Jnj-jtj.f. Die Wandmalerei der XI. Dynastie*, Mainz, von Zabern, 1984, Taf. 1(c), (d); 17; Falkarte 1, 3.

The interior of the citadel seems to have been largely occupied by rectangular brick buildings arranged within a rectilinear or orthogonal grid of streets. All buildings, except the one in the north-west corner

and some towards the north-east corner, were separated from the main wall by a continuous street. The buildings on the west and north had been relatively well preserved. But destruction and erosion had elsewhere reduced them to broken lengths of foundation walls. The excavator's plan of this part, in joining up many of these fragments into continuous lengths, creates an impression of a regular cellular design that is to a degree illusory. The walls were far more fragmentary than this and may have belonged to a more varied plan.

The building in the north-west corner seems to have been the garrison headquarters (the 'command building' of Figure 5.19). It was built directly against the main wall, and had its own staircase leading to the top. The building itself had possessed at least two storeys. At ground level, it had contained pillared halls and a colonnaded court with stone floor. A square stone tank was sunk into the floor of the main hall. This is a common feature of large Middle Kingdom buildings, and was noted in the large houses at Kahun. The pillars in these rooms had been of wood, octagonal and red-painted, standing on circular stone bases. Doorways had been framed with wooden jambs and lintels. Adjacent to this on the east stood a group of long columned halls that the excavator, W.B. Emery, conjectured was a barracks block (for which support now comes from those found at the Heit el-Ghurab sector of Giza, Figure 4.9, p. 190, Gallery sets I–IV), but could have served another purpose, perhaps storage. Further to the east lay a building with columns and a degree of axial symmetry. It lay beneath the later Eighteenth Dynasty temple of Queen Hatshepsut and from this one can argue that it was a temple of the Middle Kingdom. Yet during the Second Intermediate Period the building was reused for domestic purposes, at a time when texts from Buhen mention building work on a temple of Horus. The ambiguity illustrates, once again, the difficulty that sometimes arises in identifying pre-New Kingdom shrines.[42] Along the inside of the west wall of the citadel lay several buildings with layouts of interlocking rooms which exemplify Middle Kingdom domestic architectural practice. Over large parts of the remainder of the site a strict grid of walls was laid out. Much of it most likely served as foundations for houses or workshops of modular design, perhaps comparable to back-to-back modular houses of a few rooms each found in some of the Second Cataract forts. One dense group of rectangular chambers lay in the north-east corner, touching the girdle wall directly, and beside the 'temple'. The preserved height here was sufficient to show that many must have been cellars entered from above, and some may have been

for storing grain.

The outer line of fortifications enclosed an area measuring roughly 420 × 150 m. The citadel lay within it. The outer defences ran as a series of rectangular salients, backed by a brick wall 5 to 5.5 m thick, set with rectangular towers on the outside. The rock-cut ditch had an outer rampart with uninterrupted parapet,and was crossed by a rock causeway opposite the enormous gateway on the west side. The outer defences in this particular form may have been a creation of the late Middle Kingdom, for in places it was found that beneath them lay the remains of a much more lightly constructed brick parapet with rounded towers, perhaps a product of the early Middle Kingdom.

The space between the citadel and outer fortifications has never been fully examined, but it seems unlikely that it was ever built up to any great density. On the west side, the outer fortifications ran along an escarpment, 2 m high. During the Middle Kingdom (probably the late Middle Kingdom) this had been utilized as a cemetery, running almost the full length of the enclosed ground. No traces of housing were found during its excavation, and so the entire western side of the outer enclosure may have remained open space. For the area south of the citadel, we have very little information. But on the north an important construction was found almost immediately against the north wall of the citadel. It was so close, in fact, as to mask and render ineffective the whole northern side of the citadel fortifications. Only the foundations of this building survived, but they belong to a massive block, measuring 64.25 × 31.25 m. Although some of the walls were preserved to a height of up to 1.5 m, they showed no doorways, suggesting a basement or platform to support chambers at some height above the ground. In the early New Kingdom (or possibly during the Second Intermediate Period) this block was partly demolished, and a small mud-brick temple of Horus built over the top. The internal divisions of this building make it a characteristic large pre-planned block of the Middle Kingdom.

The style and strength of the Buhen fortifications seem designed to thwart a fairly sophisticated type of siege. We know from pictorial evidence that by the beginning of the Twelfth Dynasty siege warfare using siege engines was known in Egypt, as is shown in a scene from the tomb of the seal-bearer and general Intef of the late Eleventh Dynasty at Thebes, where a wheeled siege tower is in use (Figure 5.20 (2)).[43] This poses the question: might the Buhen citadel represent a form of urban fortification developed in Egypt during the civil wars of the First Intermediate Period, which was subsequently transferred to

Nubia as an administrative act? Is the architecture itself, therefore, the product of a bureaucratic decision rather than of a local strategic assessment? Nothing comparable has so far been found in Egypt. This could be, however, because forts of this type were built separately from existing towns. This was the case at Elephantine where the old town, despite its strategic location, was not heavily fortified, but we know from texts that a fortress called Senmet was constructed nearby (see Figure 5.3 *above*, p. 199, for a possible location). Whatever the origin, the strength of the fortified frontier at Semna (described next) constructed late in the Twelfth Dynasty suggests that the Egyptians took seriously the military threat from the tribal societies lying yet further to the south.[44]

The Second Cataract forts

The second group of forts resulted from an Egyptian annexation of the Second Cataract area in the reign of Senusret III. Despite its name, the Second Cataract is not a single precipitous fall of water but a series of lesser obstructions in two groups, separated by about 35 km of reasonably clear water. The northern end is marked by a dense group of rocky islands treacherous for navigation, the southern, at Semna, by a narrow rocky barrier through which the river gushes in several torrents. In both cases sailing was hazardous when the river was low, but at full flood the obstacles were sufficiently submerged to allow careful sailors safe passage. In the rugged and broken terrain each of the new forts took the form of an irregular polygonal figure designed to fit over an irregular natural prominence. Narrow ridges that ran up to the site were covered with spur walls to render them safe, and in most places the steep natural slopes rendered a ditch unnecessary. They show that, when occasion demanded, the rigidities of grid planning could be sensibly abandoned.

A good example of this type of fort is Shalfak, on the west bank, on the edge of an escarpment overlooking the Nile (Figure 5.21).[45] The fortified area is relatively small, measuring 80 × 49 m at the widest point. It was surrounded by a brick wall, 5 m thick, with external towers. The defended ground was, however, greatly increased by spur walls, that on the north running for 115 m. On the north a small gateway led round the walls to a staircase descending the cliff to the water's edge. The main gateway was defended by a pair of projecting walls. The interior was completely built up except for narrow streets, which ran around the base of the main wall and separated the

principal blocks. Opposite the gateway lay the granary, which was well preserved and with a plan like those at Kahun; its grain chambers showed no sign of an external doorway. They must have been reached by ladder and roof entrances. Beside the east wall the command post can be recognized by its thick walls, which could have supported sufficient masonry to turn it into a tower. The other buildings presumably housed the garrison.

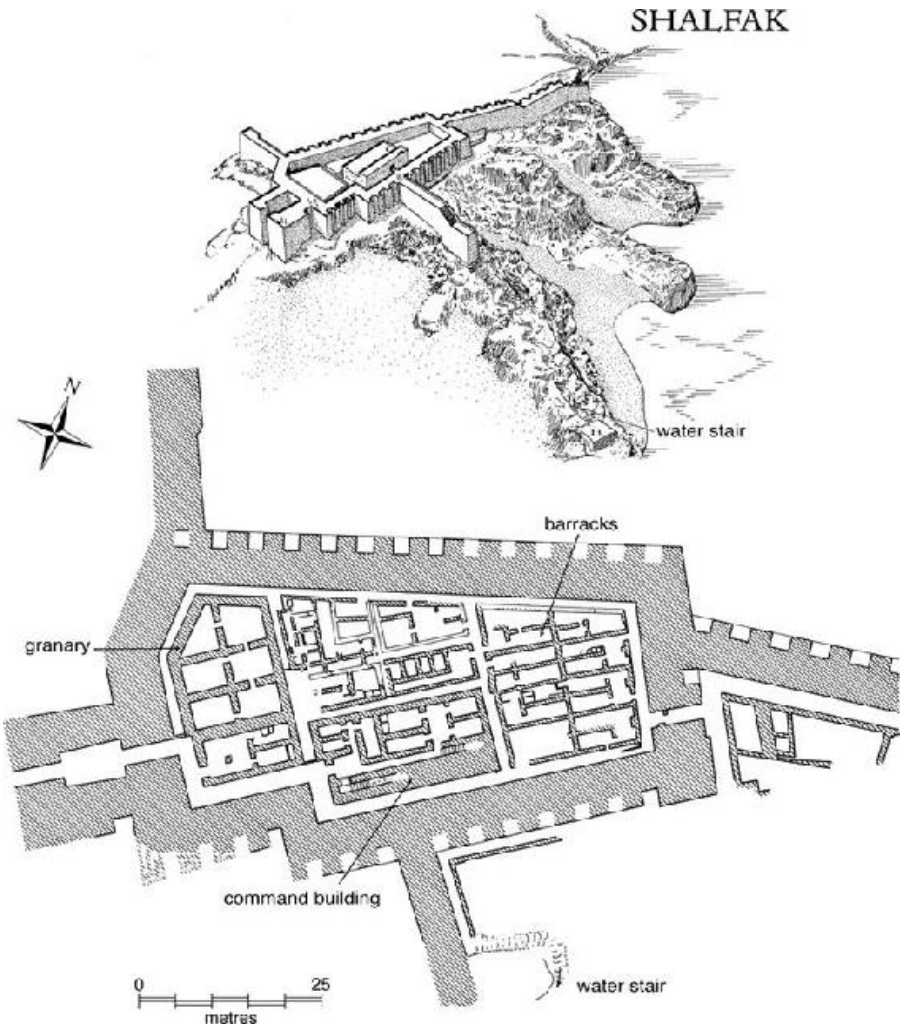


Figure 5.21 Imaginative adaptation of architecture to topography: the fortress of Shalfak in the Second Cataract area of Nubia, built by Senusret III on a high rocky outcrop above the river. Plan after Reisner et al., *Uronarti*, Map X.

Shalfak was one of a number of forts built by King Senusret III which cluster around the southern part of the Second Cataract and form an obvious defensive grouping across the narrow Semna Gorge.

An inscription of Senusret III from Semna confirms that this was indeed intended as a true frontier.

> Year 16, 3rd month of winter: His Majesty made the southern boundary at Heh. 'I have made my boundary, having sailed further south than my fathers. I have increased what was bequeathed to me.'
>
> 'As for any son of mine who shall maintain this boundary which My Majesty has made, he is a son of mine who was born to My Majesty … But as for whoever shall abandon it, and who will not fight for it, he is no son of mine, and was not born to me.'
>
> 'My Majesty has had a statue of My Majesty set up on this boundary which My Majesty has made so that you might be inspired by it, and fight on its behalf.'[46]

More will be said about this statue shortly.

At Semna a barrier of crystalline rocks crossed the Nile, leaving a gap of about 400 m. On a rocky eminence at either end Senusret III sited a fortress: Semna, the larger, on the west, and Kumma on the east (Figure 5.22 and Photograph 5.1). Semna fort took an L-shaped plan, the western wing covering a piece of relatively flat ground.[47] The principal dimensions are about 130 m from north to south, and the same from west to east. The girdle wall on the landward sides was protected by regularly spaced small towers, strengthened at greater intervals by larger projecting towers. The ground surrounding the wall was flattish, but still no outer rampart or parapet was thought necessary. Instead it was cleared for a distance of up to 29 m, and beyond this, material was heaped up and covered with a stone pavement to form a glacis and counterscarp. At either end of the eastern wing the girdle wall was pierced by fortified gateways that allowed a road to pass entirely through the fort, crossing to the glacis by means of causeways. A narrow gate in the east wall gave access to a stairway running down to the water's edge. This was protected by means of a substantial tunnel of dry-stone masonry.

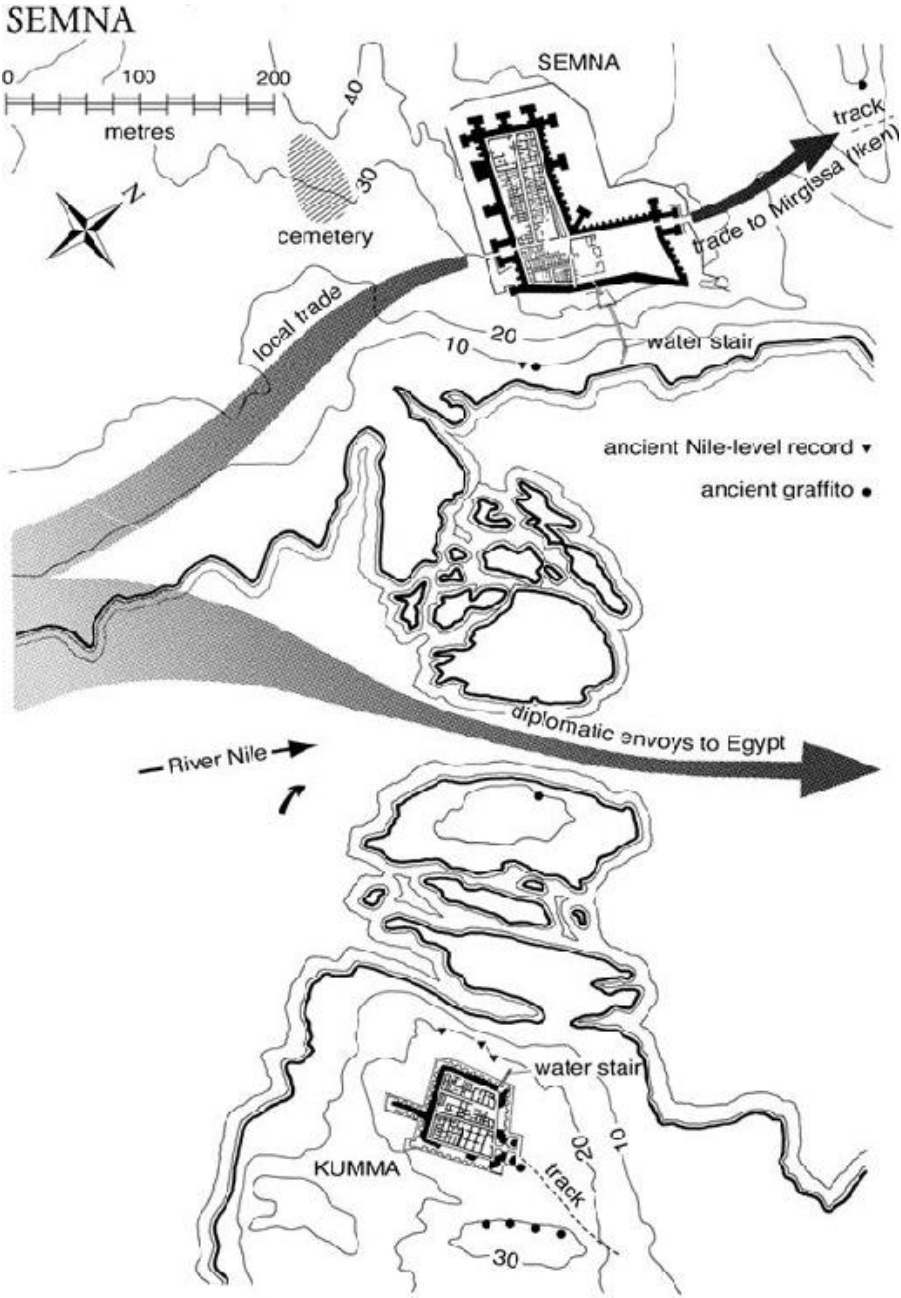


*Figure 5.22*The southern frontier of Egyptian territory in the late Middle Kingdom. The fortress system at Semna not only provided military protection, it also regulated trade and diplomatic traffic northwards.

Photograph 5.1 The fortress of Semna at the Second Cataract, looking eastwards, down towards the Nile along the line of the southern enclosure wall. The rocky barrier which forms part of the cataract is just out of sight to the right, behind the tall brickwork. Photograph taken in 1963.

The narrow streets within Semna were paved with irregular slabs of stone. They ran around the base of the girdle wall, and divided the interior into blocks. Unfortunately, we do not have the full plan of the inside. A certain amount was lost or obscured by the Eighteenth Dynasty stone temple built in the middle of the east wing, and a good part of the remainder has never been excavated. In the west wing the ground rose towards the west, and at the highest point in the fort a substantial building stood which was perhaps the command post. The walls were preserved to sufficient height to show the tell-tale marks of the ends of timber beams supporting the floor of an upper storey. Other buildings show the use of an initial modular layout and seem to have been houses, of two or three rooms. No granary has been identified.

The boundary inscription of Senusret III refers to a statue of the king present in the fort to inspire posterity to defend the frontier. The original statue has not been found. But in the reign of Tuthmosis III of the Eighteenth Dynasty a small sandstone temple was built in the middle of the eastern wing. One of the statue cults within it was of King Senusret III, the founder of Semna. On the walls of the sanctuary were carved figures of the statue itself seated inside a portable boat shrine of standard New Kingdom design. No obvious predecessor of

the temple has been located and so it remains uncertain where the statue originally stood. Was it within an enclosed space or was it publicly displayed, as Senusret III's text implies?

Across the river from Semna lay Kumma, much smaller, and built over a steep rocky outcrop.[48] So steep were its sides that the walls had in some places to be built on stone embankments. The fort has an irregular quadrilateral outline, with projecting spur walls to cover lesser ridges. A water-gate with stairs lay at the northern corner. Inside was the usual arrangement of narrow streets, like those at Semna paved with irregular stone slabs. Amongst the individual buildings a granary is easily recognized.

The Semna defences included a third fort, Semna South, 1.5 km to the south.[49] It lay in modern times on the southern edge of a plain of alluvium, but in ancient times it must have lain on the far side of a bay in the river bank, later silted up. It was small and square, measuring about 52 m along each side. Its isolated position implies that it was a dependency of Semna, either a forward observation post or check point for traffic coming in from the south. A further and striking defensive work was a mud-brick wall, 2.5 m thick and fortified by towers on high points, which ran beside the roadway which, on leaving the north gate at Semna, followed the river through the Second Cataract area.[50] It has been traced for a distance of no less than 4.5 km and had actually begun to the south of Semna, skirting round the fort to the west to create a large protected zone. Possibly Semna South marked its real beginning. This wall brings home the seriousness of the threat felt by the Egyptians in the area, and the fact that land traffic played an important role in their strategy. It is also an early example of a linear territorial defensive work (of the Hadrian's Wall type), which has a probably contemporaneous counterpart at Aswan, as much as 7 km long, protecting the land route around the First Cataract.[51]

The Second Cataract forts are striking examples of military architecture and illustrate an extension of the urban planning already encountered at Kahun and elsewhere. But in two further respects as well they illustrate Egyptian bureaucracy: the forts stood as centres for administered activity over an extensive open hinterland, and they provide a particularly vivid witness to the scale and importance of making provision for rations.

The Egyptian strategy in Nubia was not confined to static defence behind massive walls. A number of lookout posts were manned in the Second Cataract area. These are mostly known from groups of graffiti

of the Middle Kingdom left at suitable points.[52] More explicit is a group of papyri from a tomb at Thebes, dated to the reign of King Amenemhat III, which shows that the forts kept in contact with each other and with their base, probably Thebes itself, by means of regular written reports. Known as the Semna Despatches, they reveal that an active policy of desert surveillance was maintained (to which reference was made in Chapter 1, p. 27). This was done by sending out patrols to look for tracks and to bring in any wanderers for questioning. For this the Egyptians recruited desert inhabitants, the Medjay. The policy produced reports such as this: 'The patrol which set out to patrol the desert-edge … has returned and reported to me as follows: "We have found a track of 32 men and 3 donkeys".'[53] Other despatches deal with trading with Nubians at the frontier fort of Semna itself. The fine detail in these letters, evidently written to be scrutinized at Thebes, is characteristic of the Egyptian urge to record happenings that might be of interest to a superior official, and nicely illustrates the bureaucratic framework of the Egyptian presence in Nubia.

The network of control that the Egyptians threw over the region extended to regulating contacts with the Nubian communities lying much further to the south, beyond the limits of direct Egyptian control. Semna has provided another formal inscription of Senusret III, already quoted in Chapter 1 (p. 27):

> The southern boundary which was created in the 8th year under the Majesty of King Senusret III to prevent any Nubian from passing it when faring northwards, whether on foot or by boat, as well as any cattle of the Nubians. An exception is a Nubian who shall come to barter at Iken, or one with an official message.[54]

Trade and diplomacy with the enemy were to be recognized and properly regulated. Iken was the ancient name for the great fortress site of Mirgissa, lying 40 km behind the fortified frontier area, at the northern end of the Second Cataract (see also Figure 3.3, p. 117, for its New Kingdom shrine). Below the main fort on a hill lay a settlement of stone huts and a few brick houses also protected within a massive wall. This might have served as the trading-post but from the available evidence this remains conjectural.

Many of the forts, including Mirgissa, possessed large, well-built granaries. Since we can identify the granary buildings and measure

them – and even find out what their original height was in some cases – we can also take the same tentative steps as at Kahun towards calculating how much grain they might have held, and what this tells us about the Nubian operation in general. Although there are many uncertainties in doing so we must bear in mind the Egyptian passion for measuring and calculating. No granary would have been built without it.[55] Table 5.2 lays out the capacities and, applying the minimum and maximum figures used above for Kahun, sets gross population figures. Even taking the lower figures the resulting populations are hugely excessive when compared with the size of garrisons that has been postulated in the past. One excavator, G.A. Reisner, on intuitive grounds, estimated for Kumma a garrison of between 50 and 100 men, for Semna one of between 150 and 300, and for Uronarti one of between 100 and 200.

*Table 5.2*The numbers of annual ration units storable in the granaries using minimum and maximum estimates of ration size

Site	*Capacity of granary (in cubic metres)*	*Minimum annual ration units*	*Maximum annual ration units*
Shalfak	389.28	1,342	779
Uronarti (block VI only)	444.34	1,532	889
Uronarti (VI plus IV)	770.37	2,656	1,541
Mirgissa	1,063.69	3,668	2,127
Kumma	574.31	1,980	1,149
Askut	1,632.18	5,628	3,264
Semna	[1,000?]	[3,448?]	[2,000?]

The activities of the Nubian forts are only sketchily documented. In addition to serving as static points of defence we know from the Semna Despatches that a desert surveillance system was operated from them, using Medjay people from the deserts who were presumably paid in grain; some grain may have been needed for the donkeys who must have formed an important element in transport; we also know from the same texts that some of the forts engaged in trade in which bread and beer were given out by the Egyptians. If this last factor was a significant one, however, we might have expected the largest granary to have been at Mirgissa, which we know from Senusret III's boundary inscription quoted above to have been the officially designated trading-post for Nubians from the south, the place called Iken. This is not so.

The Nubian forts in the Second Cataract south of Mirgissa were

built by Senusret III to defend a frontier newly established by him. However, the military measures undertaken at this time also involved campaigns into areas lying yet further to the south. Armies need rations, and although there would doubtless have been hopes of seizing defeated Nubians' grain stores, the Middle Kingdom administrative machine was not one to leave supplies and rations to chance. From the texts mentioned in the previous chapter we can imagine the preparations: calculating the numbers of men, the length of time, the size of rations, and thus the maximum size of the stores. We can best understand the size and location of the Second Cataract granaries if we see them as part of an integrated military strategy of defence and attack. The granaries belong to a carefully planned chain of supply. Their importance in military thinking is amply demonstrated by the island fortress of Askut, located well back from the Semna frontier and therefore the most secure of the group.[56] The granary occupies so much of the interior space as to suggest that the whole fortress was really a fortified grain store acting as an emergency or rear supply depot.

The care taken with all preparations is evident from two other excavated sites, where the 'ghosts' of two temporary Middle Kingdom palaces have been discovered. One is the 'Administrative Building' at Kor, the other is the 'Palace' on Uronarti island (Figure 5.23).[57] Both were occupied for only a brief period and were laid out with such a care for northerly orientation, ignoring the lie of the land, as to suggest a founding ceremony based around astronomical orientation. A tempting interpretation is that they were temporary residences thrown up for the king during his leadership of campaigns into the regions lying beyond the frontiers and were thus 'campaign palaces', but this is only a conjecture.

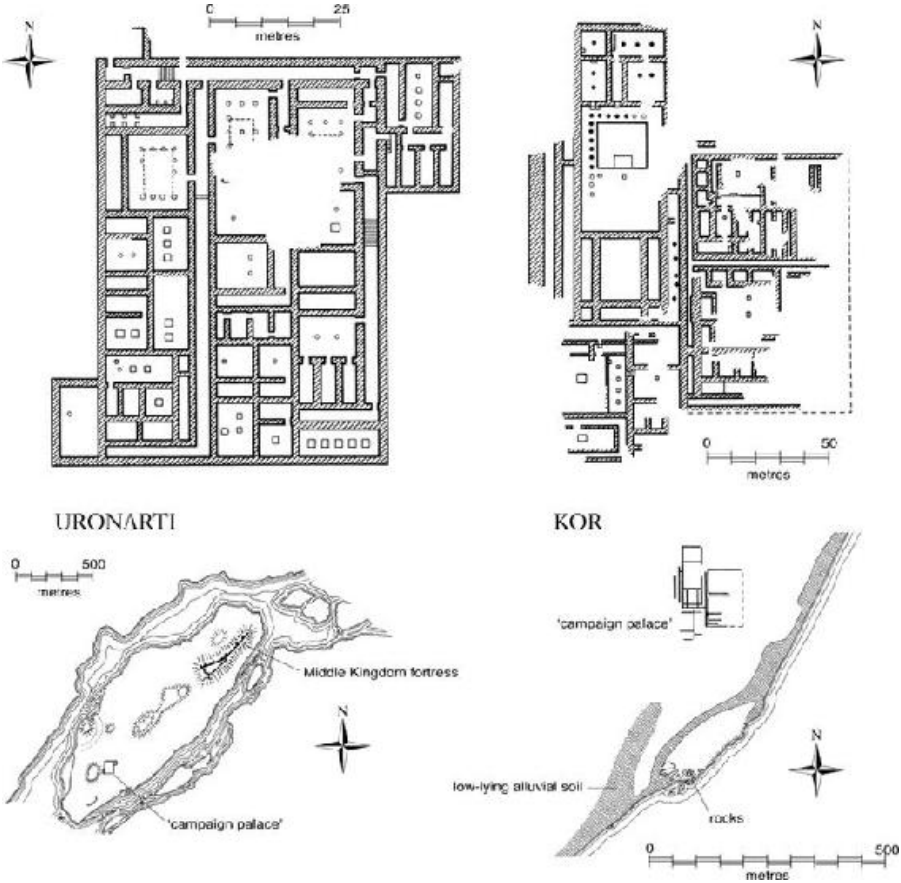


*Figure 5.23*Two short-lived buildings in Nubia, carefully aligned to true north against the natural trend of the ground, at Uronarti and Kor. Were they the king's temporary headquarters during major campaigns? After Dunham, *Uronarti*, Maps II, VI, and J. Vercoutter, *Kush* 3 (1955), Plan D, Pl. VI.

The archaeological evidence from Middle Kingdom Nubia projects into this military frontier region a massive application of Middle Kingdom administration. Behind the forts must lie a hidden mountain of scribal effort. We can only marvel at the excess of zeal and energy that the whole operation reveals.

The prescriptive society

The circumstances in which planned settlements were built in the Middle Kingdom varied greatly. The Nubian forts represent colonization of a limited sort on newly conquered territory. Their elaborately fortified perimeter walls tell us, in themselves, that these places were, in the first instances, fortresses. Thebes, in this respect,

offers the greatest contrast. At some point in the Middle Kingdom at least one of its districts containing buildings fitted with columns (and hence prestigious) was rebuilt according to a strictly gridded design, which suggests, more so than at any other site, that this was a preferred style of city design. The geometric mud-brick towns could represent an attempt at remodelling society that was seen as progressive in its day. The other examples – Kahun, Abydos South, Tell el-Dabʾa and Qasr el-Sagha (as well as others not described here) – all appear to be new foundations on previously unoccupied ground. In the case of Tell el-Dabʾa and, even more so, Qasr el-Sagha the gridded settlements seem to represent internal colonization of land being made productive for the first time. In the cases of Kahun and Abydos South, although they were built on unoccupied ground, they supplemented an existing town not very far away (in the case of Abydos South, Abydos itself, seat of a mayor; in the case of Kahun the nearby town was El-Lahun, known from hieroglyphic sources to have been in existence by this time). In neither case, however, do we know whether the existing towns at Abydos and El-Lahun were also redeveloped in the Middle Kingdom along geometrically gridded lines. In both cases the old towns survived long after the Middle Kingdom, whereas their new counterparts faded away during the New Kingdom.

Although both Kahun and Abydos South were given a prestigious reason to exist, through their service to royal statue cults, their size suggests that they were the means to bring together large labour units which the king could direct to various ends. Written sources of the Middle Kingdom identify a word (*khenret*), which can be translated as 'labour camp'.[58] Although it is impossible to link the word to any particular archaeological site, Qasr el-Sagha in particular is just the kind of place one might expect a labour camp to resemble. The evident redirection into new housing of probably quite a large sector of the population thus raises the question, was there a punitive intention – a policy of forced resettlement for whole communities – prompted perhaps by the conflicts of the First Intermediate Period? If this were so, the examples we have are spread over a significant period of time, which would suggest that such a policy, if actually formulated, became entrenched in the mechanisms of government.

The archaeological evidence also sheds light on the position of 'mayors'. They were, by the Middle Kingdom, already established figures in local government (sometimes keeping the title 'nomarch', literally 'great chief of a nome') and for a long time (through the New Kingdom) they remained the local centre of stable administration (e.g.

responsible for tax collection, Figure 7.1, p. 299). The office was frequently, perhaps normally, hereditary. In what must have been an unusual case, at Thebes during the Second Intermediate Period, a highly placed man, Kebsi, son of the vizier who was also mayor of El-Kab, surrenders the office of mayor to a 'kinsman', Sebeknakht, to settle a debt of 60 *deben* of gold which he cannot repay. The sum is a large one (see Chapter 7, p. 304) but still, from a modern perspective, seems considerably to undervalue an office which gave the incumbent considerable local control and patronage.[59] A measure of this is provided by the huge size of the tombs of some of them (at least in Upper Egypt) and their command of large numbers of men (even soldiers in private armies). Kahun and Abydos South show that, when a new town was to be established, it was put under the control of a mayor who was provided with a large residence within the walled community. At Elephantine their base was a mud-brick building in which administration and a cult of deference to the office holders were both to be found (see p. 197). It occupied a central position within the town, but neither the residence nor the town shows signs of having been subject to a period of redevelopment along geometric lines in the Middle Kingdom.[60] A somewhat different policy is to be seen at Tell Basta (Bubastis) in the north-eastern delta (Figure 5.24).[61] Excavation has uncovered a large mud-brick residence (a 'palace', in fact) for the mayor with an intricately laid out plan to accommodate many functions but within an overall grid alignment. As with the governor's/mayor's residence at Elephantine, deference to the holders of senior office was expressed by objects (in this case statues of the mayors) to which the presentation of offerings would have been a natural response. That the mayors were also simultaneously officials of the king to whom deference was due in turn was marked by means of a finely carved stone-lined doorway which celebrated King Amenemhat III. Large parts of the ancient town, of all periods, have been lost to *sebakh-* (or fertilizer-)digging and to burial beneath the adjacent modern town. But what survives of the surrounding area suggests that the palace and its adjacent mayoral tomb complex stood on a piece of open ground beside the town (of the appearance of which we know almost nothing), a piece of ground which had formerly been the town's cemetery and, in part, continued to be so for a long time afterwards. It could be that the town developed according to its own dynamic and (as at Elephantine but not at Thebes) was not flattened and rebuilt along fully planned lines but, at the same time, the mayor's position in the community was reaffirmed by creating a

new residence, presumably a lot larger than before, close to but outside the town limits. As in other areas of Egyptian life, generalizations have to accommodate local differences, often revealed by archaeology.

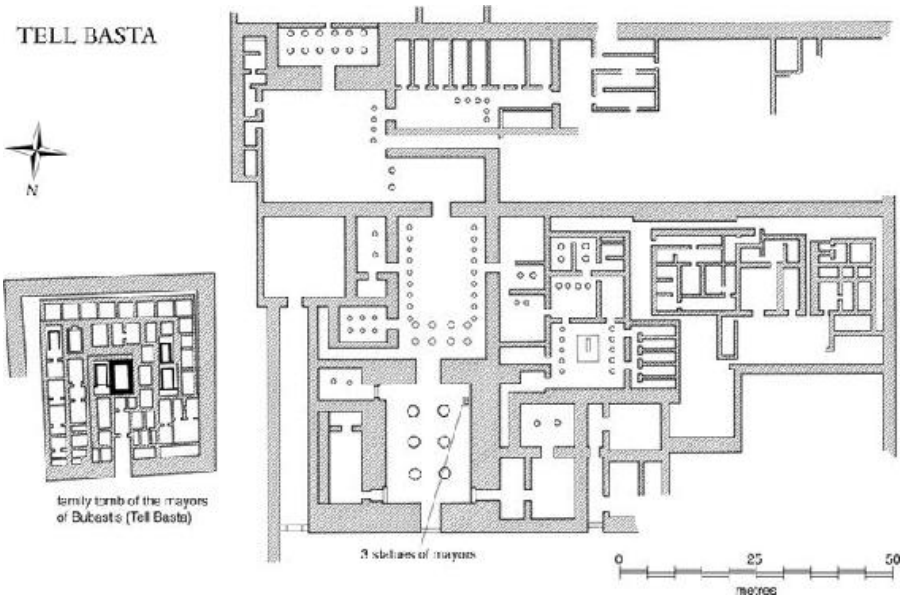


*Figure 5.24*A mud-brick 'palace' at Tell Basta (Bubastis) in the Nile delta. After C.C. Van Siclen, 'Remarks on the Middle Kingdom palace at Tell Basta', in Bietak, *Haus und Palast*, 239, Fig. 1.

The history of town planning offers a paradox in value judgements. Today we regard planning as a basic responsibility of civilized government; thus, a good thing. We are therefore inclined to applaud it when it makes its appearance in antiquity. However, ancient planning inclined towards a form – the grid or orthogonal layout – against which modern planners have reacted. Garden cities, with sweeping curves to their plans, have been one reaction; some planners have returned to the roots of pre-modern community life and have attempted to distil principles from unpremeditated 'organic' or self-organized communities, such as mediaeval Italian hill villages. This being the case, we can choose to regard early grid plans as bureaucratic impositions and question whether they are really a civilized virtue. Most modern city dwellers, none the less, both poor and rich, live in fairly regimented flats and houses and seek individual expression and identity by other means. The question is very much to the fore in considering the greatest city that has survived from ancient Egypt: Amarna of the New Kingdom (Figure 8.12, p. 350). Most of it

was built around a rejection of, or an indifference to, a social prescription and a geometric aesthetic. The organic harmonies and discords of personal decision-making prevail instead, and reflect a mentality very different from that behind Kahun.

The paradox mirrors something more fundamental still. In the texts considered in the last chapter and in the archaeological sites considered in this one, the Middle Kingdom takes on a distinctive character: it was motivated by a vision – fragmentary and incomplete perhaps – of a bureaucratic Utopia, an unformulated ideology which acted as a pattern in the making of decisions. We find it in an inclination to devise arithmetic devices for regulating economic life, we see it in documents attempting a centralized control and direction of work and property, it lives at Kahun in a prescription for how a complete city should be arranged. It may seem crude in many respects, but it could have had a future. Better systems are built by improvements to older ones. But the resources of the state, and by this we mean in the end its human resources, proved unequal to the task. As the remaining chapters will show, the bureaucratic tendency of the Middle Kingdom made no further headway. The New Kingdom state, although successful for nearly five centuries in creating and distributing wealth and honours, was a less rigid system holding temporarily in check a great many individualistic ambitions.

Why did ancient Egypt fail to endure? The same answer applies as to all civilizations: too great and too prolonged a rejection of systematized life in favour of freedom of manoeuvre by ambitious individuals, and a general acquiescence in, or preference for, muddle, shortcuts, and, when it comes to the built environment, the sense of familiarity and personal identity that arises from something with an element of personal idiosyncrasy which announces to its owner that, no matter how insignificant and irregular it might be, it is 'home'. If the work of Middle Kingdom Egypt – and of equivalent periods of bureaucratic dominance in ancient China, the Indus Valley, Mesopotamia and pre-Columbian Central and South America – had been pursued as a peaceful continuum, converting all who encountered it to enthusiastic support for order and the beauty of logical systems of government, then by now a Utopian world order might well have been achieved. 'The spirit of discord is, however, perpetually on the watch for a chance to put an end to prosperity.'[62] Anarchic love of disorder and rejection of authority are equally parts of the human personality. History is a record of the struggle between the two polarities of the mind – order and disorder, acceptance and

rebellion (as the ancient Egyptians themselves perceived). Both the rise and the fall of civilization are present in each one of us.

Notes

1 Rossi, *Architecture*; D. Arnold, *Building in Egypt: Pharaonic Stone Masonry*, New York and London, OUP, 1991; Clarke and Engelbach, *Masonry*.

2 This is the approach of A. Badawy, *Ancient Egyptian Architectural Design: a Study of the Harmonic System*, Berkeley, CA, and Los Angeles, CA, UCP, 1965. See the discussion in Rossi, *Architecture*, 32–56.

3 Moeller, *Urbanism*, 103–7.

4 Schauer, *Ungeplante Siedlungen* explores the dynamics involved. I thank Mark Lehner for bringing this study to my attention many years ago.

5 To be appreciated by comparing the plans in J.E. Quibell and F.W. Green, *Hierakonpolis* II, London, 1902, Pl. LXXIII with the results of the 1967 and later American excavations, particularly W.A. Fairservis, *JARCE* 9 (1971–2), 14–21 and accompanying plans and sections, Figs 3, 9–15; Moeller, *Urbanism*, 94–6.

6 Moeller, *Urbanism*, 226–32; 239–41.

7 Moeller, *Urbanism*, 76–8, 108, 164–74, 305–17; S.J. Seidlmayer, 'Town and state in the Early Old Kingdom: a view from Elephantine.' In J. Spencer, ed., *Aspects of Early Egypt*, London, BM, 1996, 108–27.

8 Moeller, *Urbanism*, 305–17; L. Habachi, *Elephantine* IV. *The Sanctuary of Heqaib*, Mainz, von Zabern, 1985; D. Franke, *Das Heiligtum des Heqaib auf Elephantine: Geschichte eines Provinzheiligtums im Mittleren Reich*, Heidelberg, Heidelberger Orientverlag, 1994.

9 On population estimates for Egypt over the ages see Butzer, *Hydraulic Civilization*, 81–92; J.C. Russell, *JARCE* 5 (1966), 69–82; J.A. McCarthy, *Middle Eastern Studies* 12, 3 (Oct. 1976), 1–39; D. Panzac, *Asian and African Studies* (Haifa) 21 (1987), 11–32. There is growing evidence from archaeology that settlements in the Old Kingdom were considerably more numerous than previously thought, and that Butzer's estimate should be increased. Should we double it?

10 For Göbekli Tepe (or Köbekli) see, e.g., M. Beile-Bohn, C. Gerber, M. Morsch and K. Schmidt, *Istanbuler Mitteilungen* 48 (1998), 5–78; S. Mithen, *After the Ice: a Global Human History, 20,000–5000 bc*, London, W&N, 2003, 65–7, 89–90.

11 G. Soukiassian, M. Wuttmann and L. Pantalacci, *Balat* VI. *Le palais des gouverneurs de l'é*poque de Pépy II. Les sanctuaries de ka et leurs dependences, Cairo, IFAO, 2002; C. Jeuthe, *Balat X. Ein Werkstattkomplex im Palast der I. Zwischenzeit in Ayn Asil*, Cairo, IFAO, 2012; C. Jeuthe, V. Le Provost and G. Soukiassian, *BIFAO* 113 (2013), 203–38; Moeller, *Urbanism*, 174–82, 241–4.

12 A.J. Mills, 'Another Old Kingdom site in the Dakhleh Oasis.' In Friedman, *Egypt and Nubia*, 74–8; O.E. Kaper and H. Willems, 'Policing the desert: Old Kingdom activity around the Dakhleh Oasis.' In ibid., 79–90; A.J. Mills and O.E. Kaper, 'ʾAin el-Gazzareen: developments in the Old Kingdom settlement.' In G.E. Bowen and C.A. Hope, eds, *The Oases Papers* 3. *Proceedings of the Third International Conference of the Dakhleh Oasis Project*, Oxford, Oxbow, 2003, 123–9; Moeller, *Urbanism*, 182–6.

13 Borchardt, *Grabdenkmal*; in general and with many examples of similar places, Moeller, *Urbanism*, 117–57; also R. Bussmann, *MDAIK* 60 (2004), 17–39.

14 P. Chester Beatty IV = P. British Museum 10684; Lichtheim, *Literature* II, 175–8.

15 Lehner and Hawass, *Giza*, 305–11, 394–7; M. Lehner, D. Jones, L. Yeomans, H. Mahmoud and K. Olchowska, 'Re-examining the Khentkaues Town.' In Strudwick, *Old Kingdom*, 143–91; Moeller, *Urbanism*, 144–53.

16For the houses of the Khentkawes town see also Lehner and Hawass, *Giza*, 396–7; Moeller, *Urbanism*, 196–200.
17The primary source is Reisner, *Mycerinus*, Chapter III; Hassan, *Gîza* IV, adds a further part of the plan; for the Pepi II decree, Strudwick, *Texts*, 106–7. See also Lehner and Hawass, *Giza*, 271–81, 398–401; Moeller, *Urbanism*, 150–3.
18Ahmed Fakhry, *The Monuments of Sneferu at Dahshur* I. *The Bent Pyramid*, Cairo, General Organisation for Government Printing Offices, 1959, 114–17; Vol. II, Part II. *The Finds*, Cairo, General Organisation for Government Printing Offices, 1961, contains a record of the pottery, largely Old Kingdom in date. See also Moeller, *Urbanism*, 141–4.
19N. Alexanian and S. Seidlmayer, *EA* 20 (2002), 3–5; N. Alexanian and S.J. Seidlmayer, *MDAIK* 58 (2002), 1–28.
20W.M.F. Petrie, *Kahun, Gurob, and Hawara*, London, Kegan Paul, Trench, Trübner, 1890, Ch. III; Petrie, *Illahun*, Chs II and III; Petrie et al., *Lahun*, Ch. XIII; Moeller, *Urbanism*, 271–90; R.A. Frey and J.E. Knudstad, *JSSEA* 35 (2008), 27–81; Quirke, *Lahun Studies*; S. Quirke, *Lahun: a Town in Egypt 1800 bc, and the History of Its Landscape*, London, Golden House Publications, 2005.

21The group discovered by Petrie is fully published in Griffith, *Papyri*; many of them appear in Collier and Quirke, *Papyri, Letters*; Collier and Quirke, *Papyri, Religious*. U. Luft, 'Toponyms at Lahun.' In Quirke, *Lahun Studies*, 1–41; U. Luft, *Das Archiv von Illahun* I. *Hieratische Papyri aus den Staatlichen Museen zu Berlin–Preussischer Kulturbesitz*, Berlin, Akademie Verlag, 1992.
22Winlock, *Models*. For the date see Do. Arnold, *MM Journal* 26 (1991), 5–48.
23Moeller, *Urbanism*, in which Chs 6 and 9 look in detail at the plans of houses of the Old and Middle Kingdom, including those at Kahun.
24A. Badawy, *JARCE* 6 (1967), 103–9. Vogel, *Festungen*, 132–8 has pointed out (in connection with the similar granaries at the Nubian fortresses of the Second Cataract) that granaries could store not only cereal grains but also dried fruit, such as figs and dates, thus leading perhaps to a reduction in numbers of people supported.
25Moeller, *Urbanism*, 273–6.
26Reasons for lowering population estimates for Amarna, including consideration of family size, are discussed in Chapter 8, pp. 359–61.
27S. Quirke, *RdÉ* 39 (1988), 83–106, esp. 87–90.
28Griffith, *Papyri*, 25; Collier and Quirke, *Papyri, Religious*, 117–19; Muhs, *Economy*, 65.
29Hayes, *Papyrus*, 87–109, 148–9; Quirke, *Administration*, 148–9.
30Collier and Quirke, *Papyri*, *Accounts*, 101–4; Quirke, *Exploring Religion*, 98–9.
31Griffith, *Papyri*, 19–24; Collier and Quirke, *Papyri, Religious*, 110–15; Muhs, *Economy*, 65–6; also the discussion by D. Valbelle, 'Eléments sur la démographie et le paysage urbains, d'après les papyrus documentaires d'époque pharaonique.' *Cahier de Recherches de l'Institut de Papyrologie et d'Égyptologie de Lille* 7 (1985), 75–87.
32The farmer Hekanakht arranged a regular food allowance for a household of at least 18 people, but this included the dependants of some of the relatives as well as servants, and they might as a whole have been accommodated in more than one house. Allen, *Heqanakht*, 16–17, 39–40, 107–17, 145–9; Parkinson, *Voices*, 106; Wente, *Letters*, 61. House lists from Deir el-Medina suggest quite small households, see Figure 8.16, p. 360. The widowed but remarried Naunakht of the same place had eight children, but some of them were 'workmen' and must have had their own houses. J. Černy, *JEA* 31 (1945), 29–53.

33Griffith, *Papyri*, 29–38; Collier and Quirke, *Papyri, Religious*, 100–6, 118–19; Muhs, *Economy*, 68–72.
34J.C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*, New Haven, CT, and London, YUP, 1998, 76, from a chapter entitled 'Cities, people, and language'.
35J. Wegner, *JARCE* 35 (1998), 8–32; J. Wegner, *MDAIK* 57 (2001), 281–308; Moeller, *Urbanism*, 290–6; J. Wegner, *Expedition Magazine* (Penn Museum) 48.2 (July 2006), 31–6.
36Czerny, *Tell el-Dab'a* IX; Moeller, *Urbanism*, 252–9. A second planned town nearby, at the site of Ezbet Rushdi, has also left traces, E. Czerny, 'Fragments of information. Observations concerning the architectural layout of the Middle Kingdom settlement at ʾEzbet Rushdi.' In Bietak et al., *Cities*, 69–80.
37A brief illustrated account of *ezbas* can be found in Lozach and Hug, *L'habitat*, 49–52. The authors comment upon the demoralizing effect of the uniformity of those built like barracks, and the attempts by a few enlightened landowners to do better by providing larger individual houses, more widely spaced.
38Charloux and Mensam, *Karnak*, 183–5; M. Millet, *CdK* 12 (2), 2007, 681–743; Moeller, *Urbanism*, 300–5.
39J. Śliwa, *MDAIK* 48 (1992), 177–91; Moeller, *Urbanism*, 262–71.
40Good general histories of ancient Nubia and of Egyptian involvement are Adams, *Nubia*; B.G. Trigger, *Nubia under the Pharaohs*, London, T&H, 1976. The subject is related to more theoretical studies of imperialism in Smith, *Askut*. Also Moeller, *Urbanism*, 296–300; Vogel, *Festungen*; Vogel, *Fortifications*.
41Emery et al., *Buhen*.
42H.S. Smith, *The Fortress of Buhen: the Inscriptions*, London, EES, 1976, 76–8, suggests that the brick temple rebuilt by Amenhetep I outside the citadel was perhaps the building referred to. Buhen also seems to have possessed a mound shrine during the Middle Kingdom, and this also is a candidate for the first Horus temple, see B.J. Kemp, *CAJ* 5 (1995), 45; 43, Fig. 5.
43D. Arnold and J. Settgast, *MDAIK* 20 (1965), Abb. 2, opp. p. 50.
44On the difficulties of a modern strategic assessment of these fortresses, see K. Spence, *CAJ* 11 (2004), 267–9.
45G.A. Reisner and D. Dunham, *Kush* 8 (1960), 16, Plan 2; Dunham, *Uronarti*, Section II. Shalfak is one of only two of these forts (the other being Uronarti) still to survive above the waters of the reservoir held behind the High Dam at Aswan, C. Knoblauch, L. Bestock and A. Makovics, *MDAIK* 69 (2013), 103–42, pp. 140–1.
46Hieroglyphic text: Sethe, *Lesestücke*, 83–4; translation in Lichtheim, *Literature* I, 118–20. Some commentators have suggested that the word that can be translated as 'statue' (and also 'image') should not be taken literally, see Vogel, *Festungen*, 73–7.
47Dunham, *Semna Kumma*, Section I.
48Dunham, *Semna Kumma*, Section II.

49J. Vercoutter, *Kush* 14 (1966), 125–32; L.V. Žabkar and J.J. Žabkar, *JARCE* 19 (1982), 7–50; Vogel, *Festungen*, 264–6.
50AJ. Mills, *Kush* 15 (1967), 206, pl. XXXVIIIb; Vogel, *Festungen*, 268–71; C. Knoblauch, L. Bestock and A. Makovics, *MDAIK* 69 (2013), 103–42, p. 105, Fig. 1; 138–9.
51Marked on the map in J. de Morgan, U. Bouriant, G. Legrain, G. Jéquier and A. Barsanti, *Catalogue des monuments et inscriptions de l'Égypte antique*, Series I, Vol. 1, Vienna, Holzhausen, 1894, 65; for subsequent investigations see H. Jaritz, *MDAIK* 43 (1968), 67–74; *MDAIK* 49 (1993), 107–32; Vogel, *Festungen*, 268–9;

C. von Pilgrim, 'Elephantine – (Festungs-)Stadt am Ersten Katarakt.' In Bietak et al., *Cities*, 257–70, esp. 268, Abb. 7; Moeller, *Urbanism*, 307.

52 W.Y. Adams and H.A. Nordström, *Kush* 11 (1963), 23; Adams, *Nubia*, 183.

53 P.C. Smither, *JEA* 31 (1945), 3–10; Parkinson, *Voices*, 93–5; Vogel, *Festungen*, 78–87. The quoted passage is from Despatch no. 4.

54 See Chapter 1, note 13 for references.

55 B.J. Kemp, *ZÄS* 113 (1986), 120–36; Smith, *Askut*, 43–7; *JARCE* 28 (1991), 107–32. See also note 24, on the possibility that dried fruits could have been stored in the granaries as well as cereal, so reducing the numbers of people supported.

56 Smith, *Askut*.

57 Kor: J. Vercoutter, *Kush* 3 (1955), 4–19; H.S. Smith, *Kush* 14 (1966), 187–243; also B.J. Kemp, *ZÄS* 113 (1986); Vogel, *Festungen*, 236–9; Uronarti: Dunham, *Uronarti*, 22–31, Pls XV–XIX, Map VI; also Vogel, *Festungen*, 251–6. This Uronarti building appears not to have survived the flooding of the area following the completion of the High Dam at Aswan, see C. Knoblauch, L. Bestock and A. Makovics, *MDAIK* 69 (2013), 103–42, pp. 129–30.

58 S. Quirke, 'State and labour in the Middle Kingdom. A reconsideration of the term *ḫnrt*.' *RdÉ* 39 (1988), 83–106; J. Śliwa, 'Der *ḫnrt* von Qasr el-Sagha.' In P. Jánosi, ed., *Structure and Significance: Thoughts on Ancient Egyptian Architecture*, Vienna, VOAW, 2005, 477–91; Moeller, *Urbanism*, 265, 269.

59 P. Lacau, *Une stèle juridique de Karnak*, Cairo, IFAO, 1949; Muhs, *Economy*, 59–60, 75–6. The value of the office drops dramatically further if the *deben* in use was that of the Middle Kingdom, which was around one seventh the weight it was given in the New Kingdom. This seems improbable.

60 Moeller, *Urbanism*, 305–7.

61 C.C. Van Siclen, 'Remarks on the Middle Kingdom palace at Tell Basta.' In Bietak, *Haus und Palast*, 239–46; M. Bietak and E. Lange, *EA* 44 (2014), 4–7; Moeller, *Urbanism*, 356–60. The plan in M.I. Bakr, H. Brandl and F. Kalloniatis, *Egyptian Antiquities from Kufur Nigm and Bubastis*, Berlin, Opaion, 2010, 19, Fig. 1 shows the palace in relation to earlier and later cemeteries.

62 Geoffrey of Monmouth (AD 1136). *The History of the Kings of Britain*, iii.1, translated from Latin by L. Thorpe, Penguin Classics, London, etc., 1966, 90.

Part III

Intimations of our futures

6

New Kingdom Egypt: the mature state

I live in a paradoxical world. Many claim it to be an age of reason and progress. Technology streaks ahead. Yet in people's minds there seem still to loom the essence and trappings of antique hierarchical power. Those who actually seek power find aspects of the ancient stage-managed style irresistible. They build monuments, they elevate symbols, they identify enemies to smite. We can argue that early societies, lacking a rational philosophical basis for government, needed, for the maintenance of unity and stability, leaders whose position was defined by transcendental ideas and whose person was treated with the reverence and ceremonial of a god. The sweeping ideas and the presentational devices had a real point. The divine ruler's authority was unique, beyond question, the threat of subdivision or duplication arising only in times of civil war. But humankind has moved on since the days of the Pharaohs. Between ourselves and ancient Egypt stretches a long and complex history of developing political thought and varieties of forms of government, in part based on philosophies that do not depend on gods. We know what some form of rational harmonious society might look like. Yet as the host society has changed, so the forms and trappings of rule by a divine leader have shown a remarkable capacity to adapt and to live on, often much loved. Rationality lures, atavism rules.

With the New Kingdom – the five centuries or so (1550–1069 BC) of the Eighteenth to Twentieth Dynasties – we can see that Egypt was already well advanced along the path of complex accommodation between political reality and the myths of the state. We will find no evidence that people seriously considered alternative forms of government to direct rule by a divine king. What we can observe is, on the one hand, the evolution of a more pluralist society which destroyed the possibility of the state ever fully developing into a single hierarchy in which everyone knew and accepted their place; and, on the other, the adaptation of divine monarchy to the changing circumstances in ways that have proved to be indestructible. It is the

purpose of this chapter (and parts of Chapter 8) to delineate the apparatus that articulated state myth and yet had the flexibility to accommodate a form of rule which was essentially political. All readers of this book will live under a similar compromise.

Outwardly the style of the New Kingdom was still in the tradition created in the earlier periods. It was, nevertheless, a different society from the one that had seen the building of the pyramids. The bureaucratic tendency advanced no further. Kings still wallowed in the exercise of personal power, but their state had to allow for a changed balance of internal forces, which had arisen principally through the emergence of institutions with a greater professional coherence. From their earliest stages states require the services of loyal agents who will offer advice and carry out the king's wishes, defend and even enlarge the realm by armed force, and look after the many ways of expressing deference towards real and imagined persons, thus the performance of cult and the elaboration of underlying meanings. Ministers, soldiers, priests: these three fundamental servants of the state are identifiable in Egypt in the Old Kingdom. The first and the last also looked to a distinctive and prominent physical setting for their lives, palace and temple. The palace must early have become an institution, and by the Fourth Dynasty so had the larger royal mortuary temples at the pyramids. But whereas in earlier periods the different sides to government appear to be facets of a single system, with the New Kingdom we can recognize their separate institutionalization. To this we must add Egypt's unprecedented international position as an imperial power. And overall there were developing a polish and style that make the New Kingdom more like the states that have come and gone in the world ever since, down to recent times. We must reckon, too, with another force quietly and almost invisibly eating away at the prescriptive society: personal economic emancipation. This will form the basis of the next chapter. Ancient Egypt has a modern reputation for cultural conservatism. But the New Kingdom demonstrates that this is itself something of a myth, brought about by confusion between form and substance. Circumstances had changed, and basic ideology and practices were adapting to them.

Temples and their staffs

Ideology needs architecture for its fullest expression. By its potential

for a dwarfing scale architecture compels respect in the individual and becomes the dominating horizon for crowds. Together with its style and detailing it creates a mood, often one of deference to whatever the building stands for. We will begin our survey of the New Kingdom with the temples, which now and in later periods also brought a kind of corporatism to Egypt. Subsequent to the New Kingdom they became the repositories of what was distinctive about ancient Egypt within a society that was otherwise moving on, including in ethnic composition.

If we look back to the Old and Middle Kingdoms, as far as we can tell, monumental architecture in the shape of the pyramids and their temples was kept to the periphery of the visible world: the edge of the western desert between the entrance to the Fayum and Abu Rawash, to the north of Giza. Local temples or shrines (the words are interchangeable below the scale of the monumental temple), built largely of mud brick, were scaled to fit within the dense vistas of modest brick-built towns and could be almost invisible. The balance is illustrated at Elephantine, between the popular shrine of Hekaib in its urban setting (Figure 5.4, p. 201) and the small (but beautifully decorated) stone shrine which was built early in the Twelfth Dynasty somewhere in front of the original sacred place within the niche in the granite boulders and which honoured the goddess Satis. As an institution, the local temple was an adjunct to the office of the head of the local community, so that the title 'superintendent of priests/ temple staff' was frequently held by the local 'mayor'. In the New Kingdom the monumental scale and the preference for building in stone was brought into towns (Photograph 6.1). This was the age of the Mature Formal Temple, as outlined in Chapter 3. People in general began to live in the shadow of giant stone constructions that proclaimed the gentlemen's agreement between king and gods that power was exclusively theirs. New Kingdom Thebes epitomizes this, and will be illustrated later in this chapter.

Photograph 6.1 The main temple to Amun at Karnak, viewed (in 1963) to the south-east from the top of the First Pylon. In the background is the processional route between the Eighth, Ninth and Tenth Pylons (Figure 6.2, p. 251).

For a fuller appreciation of the New Kingdom style in temples two particular factors need to be pointed out. The first arose from the structural dualism of temple cult, accommodating a hidden and a revealed aspect (Chapter 3, pp. 148–9). The New Kingdom paid great attention to the latter (the portable religious image) of which the most familiar was the portable boat shrine. Sacred boats were not new. They seem from early times to have had an important symbolic and ceremonial role. The New Kingdom contribution was to lavish great attention on certain of them (especially the barge of Amun of Karnak called Userhat-Amun, 'Mighty of prow is Amun', which was a full-size riverine boat), and to develop the smaller portable version. One 'Superintendent of Carpenters and Chief of Goldsmiths' called Nakht-djehuty, who lived in the reign of Rameses II and evidently specialized in making them, was repeatedly commissioned to make new ones for a variety of temples, probably up to a total of 26.[1] Both the riverine and the portable boats were put at the centre of temple design and temple celebrations. The portable boat shrines were made of wood, but ornately gilded and decorated and equipped with a closed cabin (sometimes called a *seh-netjer*, 'Tent shrine of the god'; see pp. 149–54) in which the image of the deity sat (Figure 6.1). Long carrying-poles on each side or set laterally and up to five in number bore the shrine along on the shoulders of those privileged to carry it.[2]

Figure 6.1 Temple processions in the New Kingdom centred on portable sacred barques. In this scene the barque is the major one for the image of Amun, having its own name, 'Userhat' ('mighty of prow'). It is shown at the mortuary temple of Seti I at western Thebes during the 'Beautiful Festival of the Valley'. The pylon of Seti's temple (identified faintly by painted cartouches, not shown in this drawing) is at the left side. The barque is carried by a group of men who represent the range of people who could participate in temple ceremonies: (1) and (2) priests; (3) chief priests; (4) Ipy, a sculptor from Deir el-Medina; (5) the vizier Paser; (6) the scribe of Deir el-Medina, Amenemipet. From a sculpted block from Deir el-Medina, reign of Rameses II, in the Egyptian Museum, Cairo 43591. After G. Foucart, *BIFAO* 24 (1954), Pl. XI (omitting texts); texts: Kitchen, *Ramesside Inscriptions* I, 403.

The resting places of boat shrines have a distinctive plan: an oblong chamber with a doorway at each end and a central square stone pedestal on which the shrine rested (Figure 6.2, 'processional way-station', p. 251). We should recall here the pedestals in early temples on which portable images were set, sheltered by a curved canopy of matting (see Chapter 3, and Figure 3.17, p. 147). Most New Kingdom temples were in fact built around the shrine of the sacred boat, and the plans of their interiors and the layouts of their exterior sacred precincts began from the desire to parade the boat shrine to the most dramatic advantage. Temples continued to contain fixed images of gods, but these now had second place. The elevation of the boat shrine to a position of eminence matched the new monumental scale of local temples. Not only did they dominate the city physically, the processions of the boat shrines along prepared avenues brought a greatly enhanced degree of spectacle to the life of the city (Figure 6.2). The scale and professionalism of New Kingdom temple cult now held the populace more in thrall, replacing some of the older bureaucratic control with greater and more overt psychological

manipulation. Then as now people love festive processions put on by the state, and feel more amicably disposed towards their rulers.

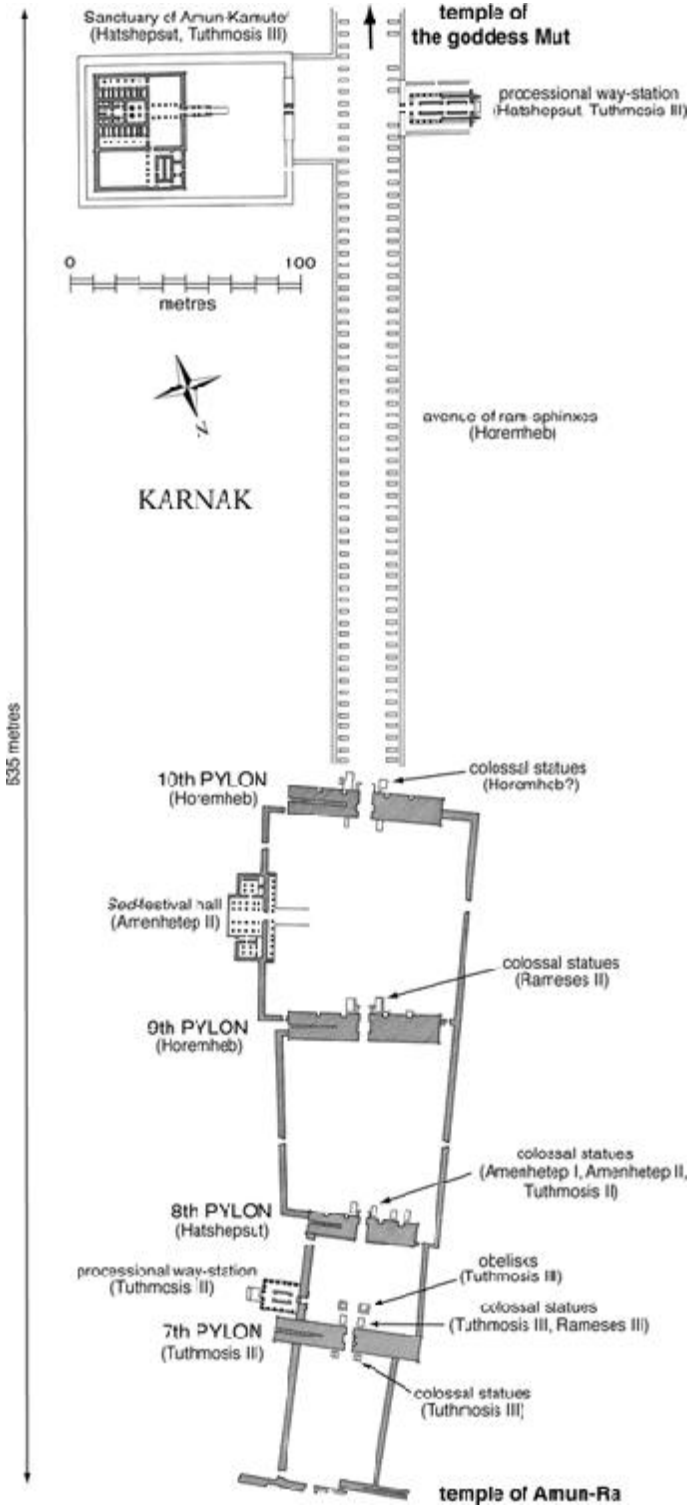


*Figure 6.2*The grand setting for temple processions provided by monumental architecture and colossal sculpture: the processional route linking the temples of

Amun-Ra and the goddess Mut at Karnak, Thebes; see also Figure 5.16, p. 225.

For the second factor, we must turn to the external architecture of temples, how they looked to the world outside, a world that, for the most part, was excluded from passing through the temple doors. The stone walls bearing scenes painted in hard bright colours on dazzling white backgrounds did not rise directly from streets or public spaces. Between the temple and the outside world lay a precinct filled with brick service buildings and perhaps lesser shrines, all surrounded by a massive mud-brick wall. It was by this wall that the temple made its most public statement. In the New Kingdom the enclosure walls of the larger temples were made to look like fortresses, with towers and battlements.[3] Part of the evidence comes from excavation. At Karnak the same excavation to the east of the sacred lake which revealed the planned Middle Kingdom town beneath (see Chapter 5, and Figure 5.17, p. 226) also uncovered a 200m-long stretch of the Eighteenth Dynasty enclosure wall with square towers set at roughly 17m intervals. Other more complete examples are known from other sites. There is also, however, contemporary representational evidence. This is important because it depicts what the tops of the walls looked like, something that the excavation of foundations can never reveal. The most explicit source is a limestone libation tank of the Nineteenth Dynasty from Memphis, which is modelled to show a wall with regularly spaced towers along all four sides and protecting the corners, and with a line of battlemented crenellations running all the way round the top (Figure 6.3).[4] The sides are inscribed with prayers to the god Ptah of Memphis, one of them reading: 'Praise to you at the great rampart; it is the place where prayer is heard.' To emphasize this a human ear has been carved at the top of each tower. There can be little doubt that this castellated structure represents the main enclosure wall of the New Kingdom temple of Ptah at Memphis, into the interior of which the public was not admitted. To the citizen of Memphis who made the model as part of a votive statue the temple was not a wondrous stone house of god, it was a citadel before which he could only stand and, in a small shrine beside or between the towers, appeal to the power of god to pass through the massive barriers that his fellow citizens had erected. The eastern temple at Karnak, mentioned below, is probably an example of the same phenomenon.[5]

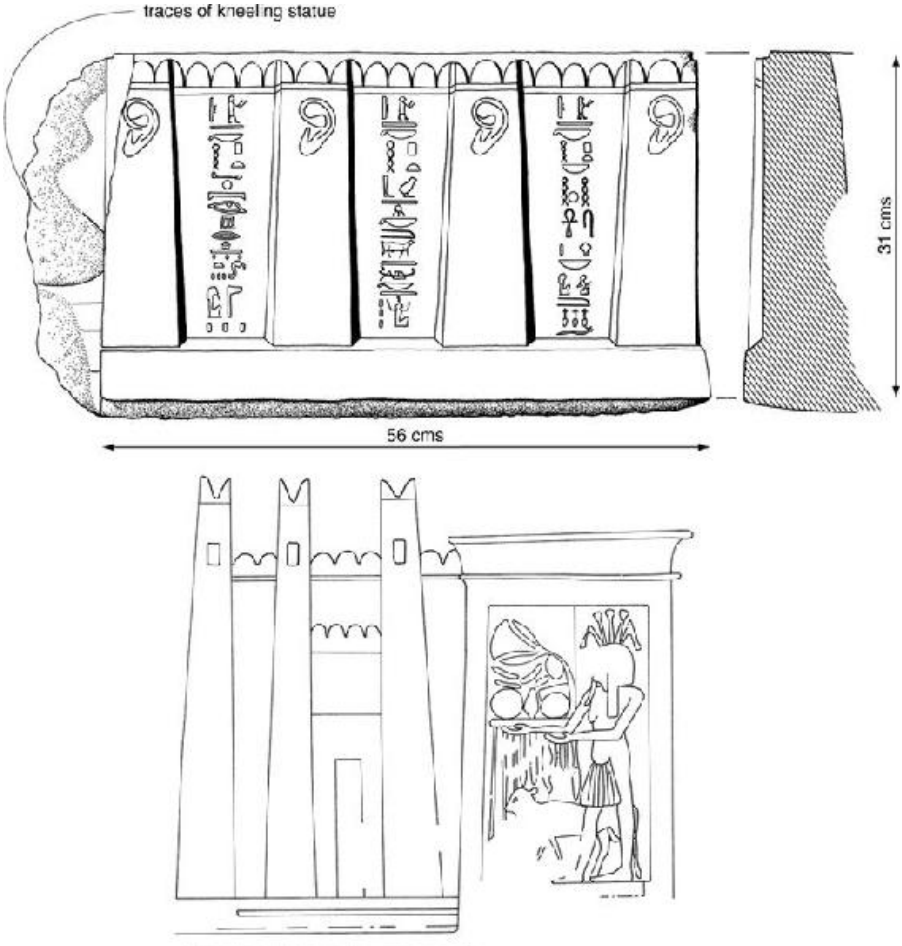


*Figure 6.3*The forbidding appearance of large New Kingdom temples, surrounded by walls built to resemble fortresses. *Above*. Ancient model of the walls surrounding the temple of Ptah at Memphis, originally carved in the form of an offering-basin being presented by a kneeling statue. After J. Jacquet, *MDAIK* 16 (1958), 164, Fig. 1. *Below*. Portrayal of a temple wall and portal at Karnak, from a scene inside the temple of Khonsu at Karnak, reign of Herihor, transition to the Twenty-first Dynasty, after Epigraphic Survey, *Khonsu*, Pl. 53.

In later periods, following the end of the New Kingom, the temple enclosure became in reality an urban citadel, containing the local community's principal assets and places of residence for its leaders, becoming in consequence a target for invading armies to attack.[6] But in the New Kingdom the castellated appearance of temple walls must have been largely symbolic. In cases where the front pylon of the temple interrupted the wall and bore, as it normally did, giant scenes of the king vanquishing his foes in the presence of the gods, the towers and battlements on either side continued the mood. In scale,

style and detailing the temple wall had, in a world now more militarily conscious than it had been, taken over the starkest image of coercion. Thus did the temple present to its community two contrasting faces: one of temporal might, the other, on feast days, of release through communal celebration. This did not prevent people from trying to establish a more personal contact with the great deity who dwelt within, as the Memphis shrine at the ramparts reveals.

So much that has survived from ancient Egypt is to do with gods and cult that we might conclude that Egypt was a sacerdotal state. If we were unable to read hieroglyphs we might well deduce that Egypt was ruled by a high priest in view of the frequent occurrence of pictures of the king performing acts of deference towards figures of gods. We would not, in fact, be far wrong as long as we remember that modern English words like 'king' and 'priest' are not coloured in quite the way that they were in ancient times. But we would be wrong if we interpreted this as demonstrating that the state rested upon a greater degree of otherworldly contemplation. Whilst the vocabulary of gods and their attributes supplied the language in which weighty and important matters were announced, surviving diplomatic correspondence with foreign rulers shows that matters of mutual interest could be discussed in a more prosaic style.[7]

Somewhere amidst the ranks of temple staff whose names we know were the thinkers responsible, for example, for the elaborate mythological texts and scenes which appear in the royal tombs, and who carefully copied and studied old texts which explored the world of the imagination and read into them new interpretations. They are the ones who most resemble our image of a 'priest'. But they are hard to identify. As they appear in the sources that have survived people with 'priestly' titles look very much like the officials in other branches of the administration. Indeed, they might well possess a string of titles that cover a priestly role as well as others quite unconnected. The modern term 'priesthood', although convenient, misleads if it implies the existence of a class of people leading a distinctive way of life. Much of the work in temples was either the routine performance of well-established rites and ceremonies or the administration of commodities and personnel. The temples as institutions are of interest in a study of the New Kingdom as much for their economic role as for their contribution to ideas, and for their part in bolstering the monarchy.

Egyptian temples were conceived, with some literalness, as a shelter for the divine images and a house for the gods who dwelt

within them. The vital essence of gods (and of kings and indeed of any person who could be represented in the form of a statue or a carving or painting on a flat surface) required the sustenance that could be derived from food offerings placed regularly before them. Offerings derived from productive sources owned by the temple. But this was not the only function of temple property. It also bestowed on the gods a status that corresponded to power and importance on a strictly material scale. The gods were given the status of landed nobility, which suited some of the Egyptians' concrete conceptions of who the gods were. Furthermore, we find the material enrichment of divine property a major theme in texts dealing with the duties of kingship.

The riches bestowed on the gods seem to have been drawn from the full diversity of Egyptian material resources, consisting of both durable forms of wealth (precious substances as well as vessels in valuable materials) and permanent sources of revenue. Foremost amongst the latter was cultivable grain land, not necessarily in the vicinity of the temple itself, but possibly several hundred kilometres distant, or even in the conquered territories of Nubia.[8] Although New Kingdom temples possessed their own labourers, often prisoners of war, much of temple land seems to have been farmed on a complex rented basis, with up to 30 per cent of the crop paid to the temple in rent.[9] One document late in the period, the Wilbour Papyrus (reign of Rameses V, *c*. 1146–1141 BC), reveals a picture of temple land subdivided into an elaborate tapestry of holdings, some cultivated by temple agents, and others by people who cover almost the entire spectrum of Egyptian society, from small farmers cultivating on their own behalf, through temple staff and soldiers, to the vizier himself, these latter groups being clearly landlords employing labourers and so introducing a third party into the division of produce (Figure 6.4). The relatively high proportion of women is notable, as are the numbers of soldiers (including Sherden mercenaries, Figure 1.5, p. 33).[10] The implications of this for our understanding of the basis of middle-class life will be pursued in the next chapter. In another document, the Amiens-Baldwin Papyrus, we meet a fleet of 21 barges cruising slowly up the Nile and making repeated landings to collect the rents (in grain) from smallholdings of this nature for transportation probably to temple granaries at Thebes.[11]

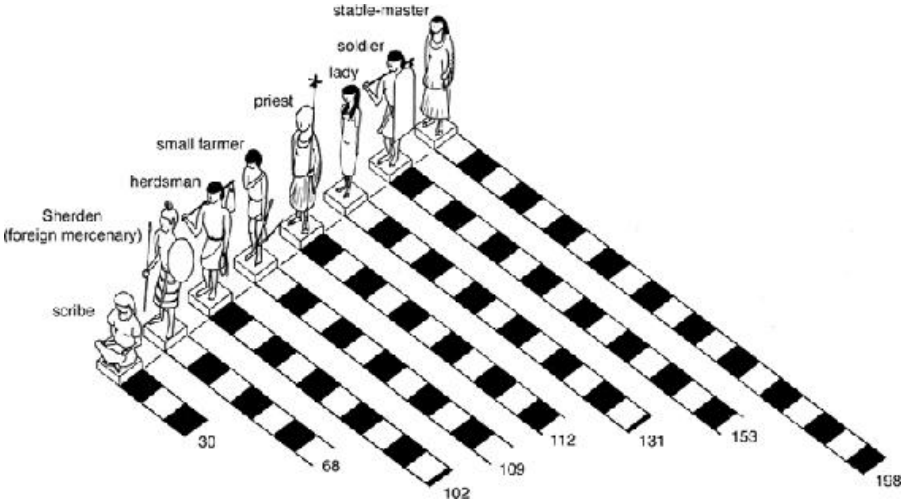


*Figure 6.4*Temple business: categories of persons renting temple land in Middle Egypt in the Twentieth Dynasty (after Papyrus Wilbour). Each square represents ten persons.

Other forms of agricultural holding donated to temples included animal herds, fishing and fowling rights, flax fields to provide the raw material from which linen garments were manufactured in temple workshops or under licence by private households, vegetable beds, vineyards and beehives. Animals, like crops grown from seed, multiply if tended properly, and it seems that, as with the land, it was common in the New Kingdom for people to look after livestock under a leasing arrangement with a temple. So a royal butler named Neferperet, who had fought in one of Tuthmosis III's Palestinian campaigns, was by a special decree of the king put in charge of four Palestinian cows, two Egyptian cows, one bull and a bronze bucket (presumably for carrying the milk).[12] His brother was to look after them and his son was to carry the bucket. The cattle were, however, to be 'offered' to the mortuary temple of Tuthmosis III, meaning that this temple was their real owner (the word 'offering' is not always to be taken literally). The decree made the arrangement heritable, so that Neferperet's heirs would go on looking after this little collection of livestock. It was also specifically excluded from the authority of the Overseer of Cattle, a mini-example of a well-documented area of ancient Egyptian law: protection from institutional poaching (which will be examined more in the next chapter). Thus Neferperet would go on tending his little herd, obliged to deliver to the king's mortuary temple a quota of offspring and of milk (which his son had to carry), and allowed to keep the rest for himself, secure in his legal protection from the

official who was normally in charge of such arrangements.

Temples could be granted access to mineral resources. So the temple of Seti I at Abydos was granted rights at the gold mines in the eastern desert (Kanais, in the Wadi Mia), a gang of workmen to bring the gold back to the temple, and a settlement with a well at the mines themselves.[13] The temple of Amun at Karnak seems to have had a similar arrangement for gold mining in this area, and another for acquiring galena (the lead ore, lead sulphide), used for eye pigment and as a medicament, also from the eastern desert.[14] Direct gifts of precious stones and metals also appear as a regular expression of royal generosity towards the gods. It was to the temples, too, that the king turned to dispose of surplus or unwanted booty from foreign campaigns. The temples offered secure storage and administration and, perhaps even more important, a receipt in the form of texts and scenes displayed in the temple that recorded the gift as a royal donation worthy of permanent commemoration. These gifts would also be entered into the written inventories of temple property. All of these various types of wealth, from beehives to boats, were designated by a common word for 'offerings'. What was actually presented to the god during the offering-ceremonies must have been regarded merely as tokens.

In considering the economic role of temples we are faced with a classic example of the general problem which one culture (our own) has in categorizing another. Temple records were written as if each temple were an independent institution, and this can create the impression that they were independent sources of wealth and power. But if we take a more objective stance we can see that, shorn of ideological nuance, temples comprised a major sector of 'the state' as we would see it, working in a symbiotic relationship with the palace, though with a balance of responsibility (in favour of the temples) compared with what we see in the Old Kingdom (where greater responsibility for directing temple income rested with the king; see p. 166). Thus a separate section of the Wilbour Papyrus is devoted to a special category of agricultural land, called *khato*-land, which belonged to the Pharaoh but was administered by temples.[15]

The absence of demarcation between temples and other areas of administration becomes very prominent when we consider the example of the payment of the necropolis workers of Deir el-Medina at Thebes whose job it was to prepare the royal tomb in the Valley of the Kings.[16] They were essentially employees of the king, and so it seems natural to find that their wages sometimes come from the 'Treasury of

Pharaoh' or the 'Granary of Pharaoh' and its overseers. The Theban temples nevertheless regularly supplied them with seemingly small quantities of a special kind of pastry or cake (containing fat and honey) and beer.[17] Late in the Twentieth Dynasty (apparently a time of economic difficulty at Thebes), we find grain from tax assessments on various temples, and from *khato*-land administered by them, taken to western Thebes for the necropolis workmen and stored in granaries under the charge of the mayor of western Thebes (another interesting use of mayors).[18] Earlier in the Dynasty we find the same official blamed for not having paid these workmen from the 'offerings' of the century-old mortuary temple of Rameses II (the Ramesseum). The demonstration by these men outside others of these temples might suggest that they, too, regarded the mortuary temples as potential sources of payment, although perhaps they targeted them as the nearest representative of authority.[19] At other times these men were paid from the temple of Maat at Karnak, across the river.[20] And when things went wrong, the ultimate court of appeal was the vizier. The independence of temples as owners of wealth was probably very much a matter of ideological nuance.

A second channel of expenditure was temple overheads, principally the payment of staff in kind. By a ceremony called the 'Reversion of offerings' the offerings actually presented to the god were next taken before statues of lesser gods, and then finally divided amongst the various groups of the temple staff. The daily offering-list carved on the walls of the temple of Medinet Habu, for example, includes 5,500 loaves, 54 cakes, 34 dishes of sweets, 204 jars of beer, and an extensive array of other foods.[21] But temple stores were designed to handle even larger quantities and we have no way of knowing how many other people had entitlement to payments, although the Theban necropolis workmen from Deir el-Medina were amongst them. Did temples pay for their own aggrandizement and fabric maintenance? It is reasonable to think so. The building and enlargement of temples was another traditional duty of kings, but since temple income was initially bestowed by the king, the further use of this to pay for improvements would have remained within the spirit of the original bequest; and, in any case, his authority was presumably necessary for any major alteration in the disposal of temple income. By the Late Period, sources become explicit that temple building owed much to the initiative of the leaders of local communities. The system had an element of elasticity, too. Apart from a degree of *ad hoc* requisitioning by one institution from another (see Chapter 7, p. 298), it was possible

for one temple to rent lands from another temple and, as a result of occasional inventories and revisions of temple property, for parcels of land to be transferred from an old endowment to a new one which now seemed worthier. Behind the florid language of piety lay a reassuring rationality.[22]

It seems clear from ancient written testimony as well as from the logic of the situation that temple economies produced a surplus of income over requirements. Some years were good to farmers, some years were bad. Temples expected in general to build up substantial reserves or buffer stocks of grain and other commodities that they stored in massive warehouse blocks (or magazines) within the temple enclosure. Several relatively complete layouts have survived, and these are supplemented by detailed contemporary pictures (Figure 6.5, *top*). The best preserved on the ground is the set of magazines attached to the Ramesseum, the mortuary temple of Rameses II (Figure 6.6 and Photograph 6.2).

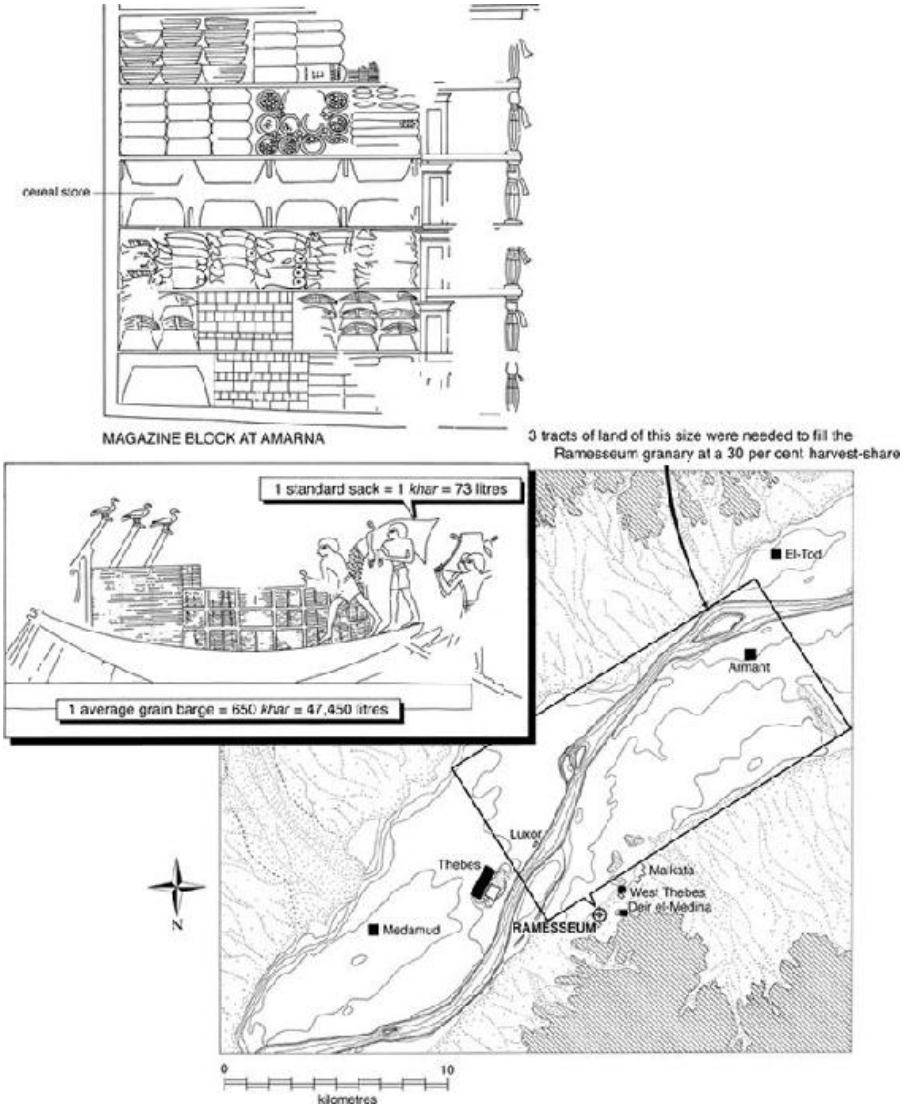


*Figure 6.5*The key to economic stability: buffer stocks of grain. The long narrow storerooms – 'magazines' – in large temples such as the Ramesseum at western Thebes (Figure 6.6 and Photograph 6.2) were used to store a wide variety of commodities, as illustrated by the Amarna tomb scene (*top*, tomb of Meryra), which depicts part of a magazine block at Amarna. However, it is highly likely that in any large magazine block most of the capacity was used to store cereal grain, as at the Ramesseum. We know (from Papyrus Amiens-Baldwin) that the average capacity of a grain barge was 650 standard sacks, or *khar*. It would have taken about 350 boatloads of grain to fill the Ramesseum granary. Cereal yields varied according the quality of the land, between about 5 and 10 *khar* per *aroura* (2,735 sq. metres). At the low but common yield of 5 *khar* from land which paid to the temple a 30 per cent harvest-rent, the Ramesseum would have been drawing on a tract of land equivalent to about 412 sq. km. To give the reader some idea of what is involved, a piece of land about one-third of this is marked on a map of the Theban area. In practice temple landholdings were split into large numbers of widely spaced fields.

If one considers an extrapolation from the diagram to include the numerous lesser provincial temples it is easy to envisage just how much farmland was tied in some way to temple ownership or management. Amarna magazines after Davies, *Rock Tombs* I, Pl. XXXI; the boat-loading scene after Landström, *Ships*, 134, Fig. 393.

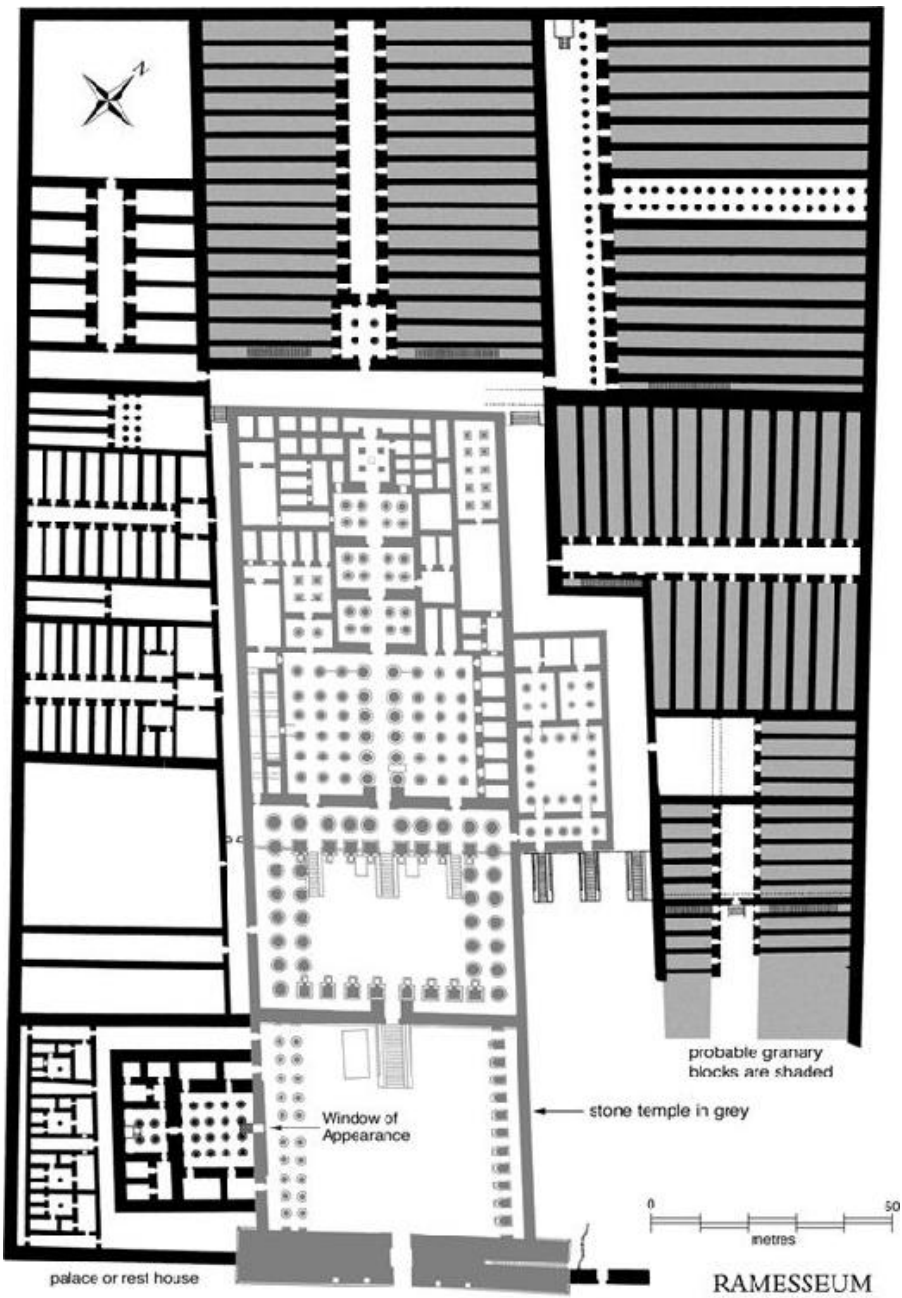


*Figure 6.6*The Ramesseum, mortuary temple of Rameses II at western Thebes. The stone temple is rendered in grey; the surrounding brickwork (Photograph 6.2, p.

260) in black. The latter includes a small palace or rest house with a Window of Appearance (cf. Figure 6.10, p. 271), and a huge set of granary chambers (shaded). It has been assumed that all those blocks with staircases were granaries, the staircases enabling them to be filled through roof apertures. The total floor area is about 8261 sq. m. The storechambers were tall and vaulted (Photograph 6.2) and it is reasonable to assume that grain was stored (perhaps in compartments) to a depth of 2 m. This would give a total capacity of 16,522 cu. m, or 16,522,000 litres, equivalent to about 226,328 *khar*. On an average annual ration for a working family of 66 *khar* of emmer and barley combined, the Ramesseum granary would have supported about 3,400 families, easily the population of a medium-sized city. After Hölscher, *Mortuary Temple* I, Pl. 10, opp. p. 74.

*Photograph 6.2*Institutional wealth: some of the mud-brick granary chambers in the magazine blocks attached to the Ramesseum, mortuary temple of Rameses II at western Thebes, viewed to the north-east. The arched brick roofs belong to the original building.

To give the reader some idea of the immense concentration of cereal wealth that a major temple could store, the total capacity of the chambers most likely to have stored grain has been calculated and is given in the caption to Figure 6.6. When converted to ancient Egyptian measures it amounts to 226,328 *khar* (or ‘sacks’). On an average ration for a workman’s family of 66 *khar* per year of emmer

and barley (attested in New Kingdom records from Deir el-Medina), the Ramesseum granaries, if ever filled to capacity, would have supported about 3,400 families for a year, that is, 17,000 to 20,000 people, the population of a fair-sized ancient city (and the same as the estimated population for Amarna; see pp. 331, 361), and a considerably greater population than the Memphis palace of Seti I discussed later in this chapter (pp. 279–80). We can make two general observations on this exercise. It is unlikely that at any one time the granary of more than one mortuary temple was fully in use; and, like the granaries at the Nubian forts discussed in the last chapter, storage capacity encompassed much more than the needs of an immediately resident and dependent population. The Pharaonic economy in times of internal stability operated at a level much higher than that of subsistence. Grain was wealth, and great stores of it were there for shipping around the country and even abroad for the realization of grandiose royal schemes. Major temples were the reserve banks of their day.

The ideal was excessive abundance, with granaries overflowing. There is no mention in ancient texts of a 'profit', but in practice that was what good harvests brought. For the larger temples also possessed their own trading ships, not only in Egypt but also abroad. The temple of Seti I at Abydos, for example, was given a sea-going ship for foreign trade equipped with 'traders' by Rameses II.[23] 'Traders' seem to have been a regular component of temple staffs and presumably bore the responsibility for exchanging surplus produce – not only grain but other things such as linen – for goods for which the temple had a demand, which might be sesame oil or papyrus rolls.[24] Since everything in Egypt was exchangeable, a gradual accumulation of non-perishable goods, particularly metals, in the temple stores increased the temple's permanent reserves. The consequences of this are difficult to assess. But the way that institutions (primarily temples) dominated the country's economy, especially their capacity to build up massive reserves, must have had a markedly steadying influence on the general economy, balancing out, for example, the effects of good and bad harvests and so keeping prices reasonably stable through the year and from one year to another. Hence the parallel with modern reserve banks. When we come to consider the private sector in the next chapter this will emerge as a significant factor amidst the little evidence that we possess.

The wealth of the large temples and the authority of their gods lead to a key question. Did the managers – the priests – perceive the extent

of their power? In particular, were those in charge of the cult of Amun at Thebes a political threat to kings? To find an answer we have to consider two further aspects of New Kingdom society: the interrelationship between the monarchy and the cult of Amun, and the power of other institutions, namely the palace and more particularly the army.

Monarchy and the cult of Amun

The demands on kings were now considerable. They stood at the head of a large administration that, in the case of the temples, now included substantial institutions of a semi-independent nature; theirs was the responsibility for leading armies into battle against the well-equipped forces of western Asia; and in them resided the dignity of an imperial state with far-reaching diplomatic ties. Respect for kings was essential if they were to hold the edifice of state together. Monarchy on its own, however, does not guarantee respect. Too much hangs on accidents of birth. It requires the backing of myth and the regular reinforcement of ceremony to put into perspective the shortcomings of individual kings. By myth and ceremony, a king is not left to stand entirely by his own merits. He assumes a transcendental role and the respect of his people focuses on the office. The New Kingdom put much effort into this, and nowhere more so than in the mutual absorption of king and Amun.

During the Old Kingdom, the concept emerged that the king was the son of Ra, the sun god. From the mid-Fourth Dynasty onwards, one of the king's two cartouche names described his manifestation as just this: 'The Son of Ra, N' (where N was the personalized Ra name of the king), as in the example, 'Enduring are the souls of Ra' (Ra name of King Menkaura, builder of the third pyramid at Giza). The importance of the royal dependence on the sun was proclaimed in stone in the form of the pyramids and, in the Fifth Dynasty, by large solar temples attached to the pyramids. The Egyptians sometimes used the word 'son' metaphorically, to refer to a loyal and loving son-like status that a person, including a king, might hold *vis-à-vis* someone else. However, the 'son of Ra' claim was taken more literally. A late Middle Kingdom tale (Papyrus Westcar) set in past time, at the court of King Khufu, contains an account of how the future ultra-pious kings of the Fifth Dynasty were born from a sexual union between Ra and the wife of a priest of Ra.[25]

Having the sun as a supreme deity creates a difficulty. It is the most visible and obvious of sources of superhuman or transcendental power. Yet its very visibility and fixed shape make it more difficult to comprehend in personalized terms. Hymns and prayers and offerings tend to assume a human-like capacity on the part of the deity to receive them. The Egyptians instinctively appreciated this, and at an early date gave to most of the gods and goddesses of Egypt the form of a human body, though sometimes retaining as an emblem an animal head. One form of the sun god, Ra-Horus of the Horizon (Ra-Horakhty), was a man with the falcon head of the god Horus. But in other contexts the sun's disk was left as a detached element, perhaps symbolically conveyed forwards by a scarab-beetle, itself a symbol of creation as the god Kheprer, or journeying in a solar barge above the head of a ram-headed god. When it came to the direct worship of the sun by hymns and the presentation of food offerings, the air of mystery that is needed to cloak a somewhat artificial act was difficult to sustain. Sun temples were open to the sky, and the hymns were chanted and offerings presented from the top of an open platform. The sun provided a good poetic image for the king, but was far less suitable a model for his divine counterpart.

New Kingdom thinkers found a way to overcome this (but not to the satisfaction of all, including King Amenhetep IV/Akhenaten, as we will see in Chapter 8). The supreme god who fathered the king and remained the ultimate basis of royal respect was given the form of a man. This was the god Amun. It was not an arbitrary choice, for Amun was an ancient god of Thebes, the home of the kings of the Eighteenth Dynasty. The early history of Amun is not well documented, but it is clear that his pre-eminence in the New Kingdom was a result of deliberate ideological emphasis. Two characteristics, at least as old as the Middle Kingdom, gave Amun a particularly powerful image. With no modification to his human form he had become the sun god, Amun-Ra, and was now the recipient (even under the simpler name Amun) of hymns addressed to the sun. He also took over the powerful ithyphallic image of Min of Coptos, a neighbouring city (Figure 3.13, p. 140). In the New Kingdom, his position was well expressed by a common epithet: 'Amun-Ra, King of the Gods.' At Thebes especially he was shown in the temples as the divine father-figure who looked after the king and presided over his victories, and this role extended to the mortuary cult now centred in new-style mortuary temples on the west bank of Thebes.

Amun also moved to the heart of the myth of the divine birth of the

king, which now joined the repertoire of scenes on temple walls. Two complete examples have survived – in Queen Hatshepsut's mortuary temple at Deir el-Bahari, and in Amenhetep III's temple at Luxor – but fragments of others are known.[26] The crucial episode of the whole sequence is handled with great delicacy (Figure 6.7). The reigning monarch's mother is shown seated opposite the god Amun, who with one hand touches one of her hands, and with the other offers her the emblematic hieroglyph for 'life'. The protective goddesses Neith and Selket sit below on the marriage bed, holding the couple aloft. The accompanying text is a little more explicit:

> Words spoken by Amun-Ra, Lord of Karnak, pre-eminent in his harim, when he had assumed the form of this her husband, King Menkheperura (Tuthmosis IV), given life. He found her as she slept within the innermost part of her palace. She awoke on account of the divine fragrance, and turned towards His Majesty. He went straightway to her, he was aroused by her. He allowed her to see him in his divine form, after he had come before her, so that she rejoiced at seeing hisperfection. His love, it entered her body. The palace was flooded with the divine fragrance, and all his odours were those of the land of Punt.[27]

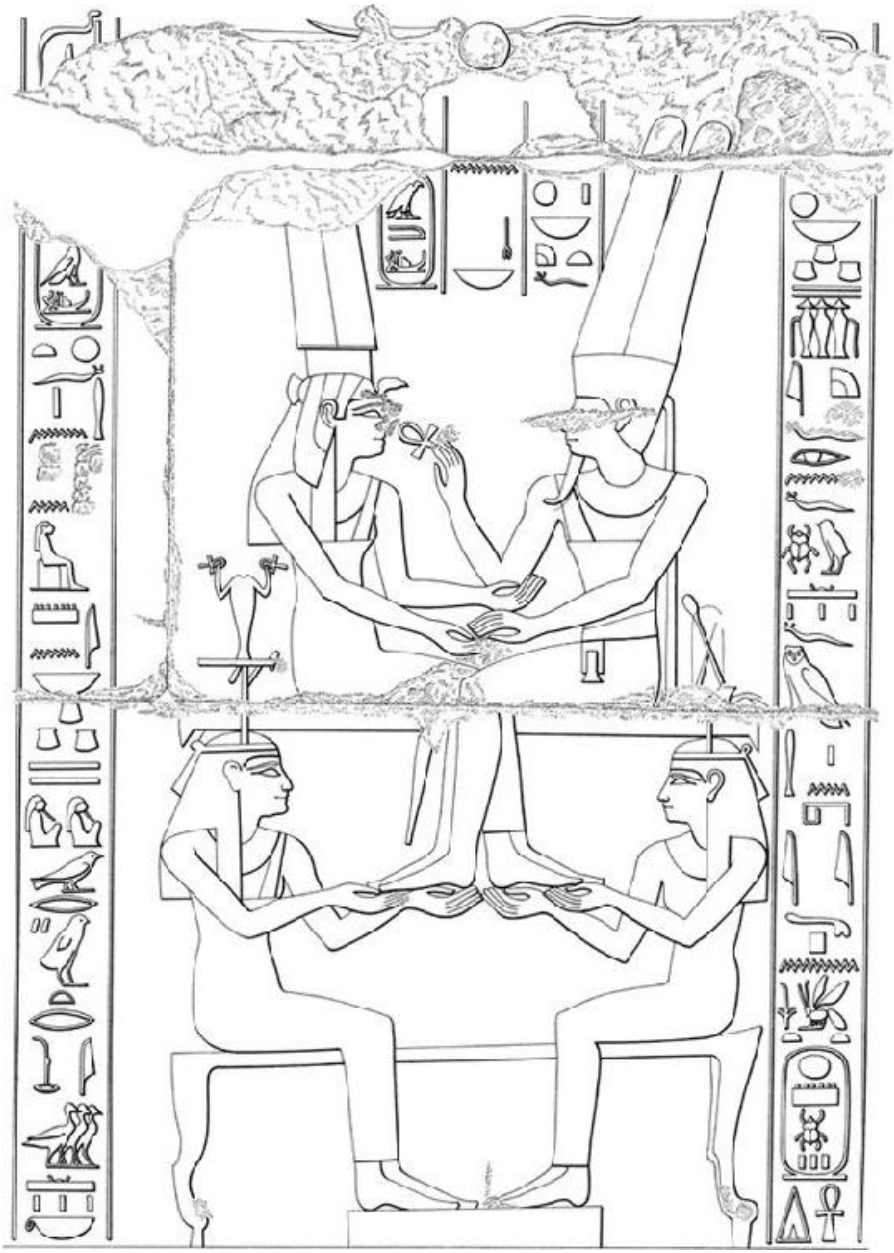


Figure 6.7 The divine origin of kings: the god Amun (*upper right*) impregnates Queen Mutemwia (*upper left*), wife of Tuthmosis IV and mother of the future god-king Amenhetep III. Beneath them sit the goddesses Selket *(left*) and Neith (*right*). A scene from the divine birth cycle at Luxor temple (see Figure 6.9, p. 268 for the location). After H. Brunner, *Die Geburt des Gottkönigs; Studien zur Überlieferung eines altägyptischen Mythos*, Wiesbaden, Harrassowitz, 1964, Taf. 4; E. Otto, *Egyptian Art and the Cults of Osiris and Amun*, London, T&H, 1968, Pl. 30 (redrawn by B. Garfi).

After a brief speech of joy by the queen he declares: 'Amenhetep, prince of Thebes, is the name of this child which I have placed in your

womb.' Subsequent scenes portray the fashioning of the child and his spirit (*ka*) on a potter's wheel by the ram-headed creator god Khnum, and the birth itself in the presence of numerous protector spirits.

Queen Hatshepsut's version goes on to illustrate how the power and authority of well-tailored mythical portrayals can replace reality. Historically she was the daughter of Tuthmosis I and wife of the next king Tuthmosis II, whom she outlived by more than twenty years. For the first few years of her widowhood she acted as regent for the young successor, her nephew Tuthmosis III, but then had herself proclaimed king, and ruled as the dominant partner. In her mortuary temple at Deir el-Bahari, western Thebes, she appears throughout as the rightful king, depicted and frequently referred to in texts as being of male gender. In this latter respect the conventions of kingship offered no choice. A fine set of scenes at Deir el-Bahari records the story of her origins. Early on occurs the divine birth sequence, in which she is from the beginning designated as king of Egypt. As the story unfolds it shifts gradually to the mortal world. She visits Lower Egypt with her real father, Tuthmosis I, and is taken in hand by all the gods of Egypt, who crown her and draw up her titulary. Now merging more closely into the material world her father presents her to the court and appoints her as his successor and co-regent:

> This is my daughter, Khnemet-Amun Hatshepsut, may she live. I designate her as my successor. She it is who shall be on this throne. Assuredly, it is she who shall sit on this heavenly throne. She shall issue decrees to the people from all departments of the palace. Assuredly, it is she who shall guide you. Obey her word, assemble you at her command … For she is your god, the daughter of a god.[28]

The people react with joy, the lector-priests compose her titulary, her name is set on buildings and on official seals, and finally her coronation takes place on New Year's Day. Other records of this situation – that Hatshepsut was the heir and successor of Tuthmosis I with no reference to either Tuthmosis II or III – have survived at Karnak. All of them describe on a monumental scale events that are specific, detailed, but, as far as we can see, fictitious. Even the New Year's Day coronation date referred back to an ancient custom now obsolete. Had accident deprived us of all sources for the period other than these, their detail and consistency would oblige us to accept their record as authentic history. Therein lies a warning.

This aspect of Hatshepsut's reign takes us back to Chapter 2 and to the basic myth of the state: the uninterrupted sequence of legitimate kings ruling in a single line of succession descended from the gods. Hatshepsut's reign was made to conform to the ideal image. To dismiss the sources as propaganda misses the point, particularly if it is implied that they differ in purpose from formal documents of other reigns. The temples recorded for eternity and provided only a single formula for kingship into which earthly events had to be fitted with whatever degree of transformation was necessary. The record of Hatshepsut's reign was made consistent with an ancient, established pattern, and this was all that mattered.

Thebes: the ceremonial city

Thebes was not really, in the New Kingdom, Egypt's capital city in the sense that the court and the highest tiers of administration were centred there. This was the role of Memphis and, in the later New Kingdom, the eastern delta city of Per-Rameses (near the modern town Qantir). The family of the Eighteenth Dynasty kings had come from Thebes, and during the New Kingdom the Theban god Amun was given extraordinary prominence. This left the city with a special role in the state: a sacred city given over to festivals in which the cult of divine monarchy held a leading place. Poetry celebrated its primacy:

> Thebes is the pattern for every city. Water and earth were within her from the beginning of time. There came the sands to furnish land, to create her ground as a mound when the earth came into being. And so mankind also came into being within her, with the purpose of founding every city in her proper name. For all are called 'City' after the example of Thebes.[29]

Two comments are required: the basic image is that of the first primaeval mound emerging from the waters of chaos and on which the act of creation was first performed. Here the mound is identified as the site of Thebes. The second point is linguistic: Thebes was frequently called simply 'The City'.

The monumental heart of New Kingdom Thebes was the temple of Amun at Karnak (Photograph 6.1, p. 249). This now stands within a huge enclosure surrounded by a massive brick wall of the Thirtieth Dynasty. In places, particularly on the south, this wall must follow the line of the New Kingdom enclosure wall, but on the east it takes a course somewhat outside. Even so, in the New Kingdom the enclosure

must have covered an area of at least 400 × 400 m.

The temple as we now see it appears to be flush with the surrounding fields and with the modern town of Luxor. Excavations into the ground below (summarized in Chapter 5; Figures 5.16 and 5.17, pp. 225 and 226) have revealed, however, that the New Kingdom temple was laid out at the expense of the earlier city of Thebes. This had grown by the late Middle Kingdom into an extensive city mound covering an area at least 1,000 × 500 m. This puts it into a category of places that were quite large by ancient standards. A part of it had been laid out to conform to a grid plan, and within it lay palaces (known also from texts). During the Eighteenth Dynasty, the city was evacuated and levelled to provide a foundation platform for the new dominating stone temples. This probably occurred on a piecemeal basis, with some parts of the site, notably the 'Treasury' of Tuthmosis I and the southern part of the southward processional avenue (between pylon nos 8 and 10), aligned according to the prevailing street and plot pattern of the old city, whilst the rest of the temple took on an alignment perpendicular to the river which the old Middle Kingdom temple had followed as well.[30]

The residential part of Thebes must have been built anew, on open ground, involving a fresh allocation of plot ownership. Being on new ground meant that it was at a lower level than the new temple now perched on the flattened top of the old city mound. The remains of this new city must now be beneath the general level of the ground water. Modern excavations have encountered it in only small exposures. The location of one neighbourhood is given by an inscription on a giant obelisk quarried in the reign of Tuthmosis III and finally erected by Tuthmosis IV in a chapel built against the back, in other words, the eastern wall of the temple of Amun-Ra. This chapel was intended for people who had no right of access to the main temple. It was a 'place of the ear' for the god Amun, where the god could hear the prayers of the townspeople. It seems also to have contained a statue of 'Rameses who hears prayer', a revealing glimpse of the reality behind the cult of divine kings.[31] The obelisk inscription states that it was set up in 'The Upper Gateway of Karnak, opposite Thebes.'[32] The implication is that it faced towards the city lying over to the east. We should imagine, however, a city covering a much larger area than before, reflecting the more expansive atmosphere of the New Kingdom and lack of city walling, a feature of the age (Figure 6.8). The short-lived city of Amarna spread its main built-up part over an area about 5 km long by 1 km wide (Figure 8.3, p. 328).

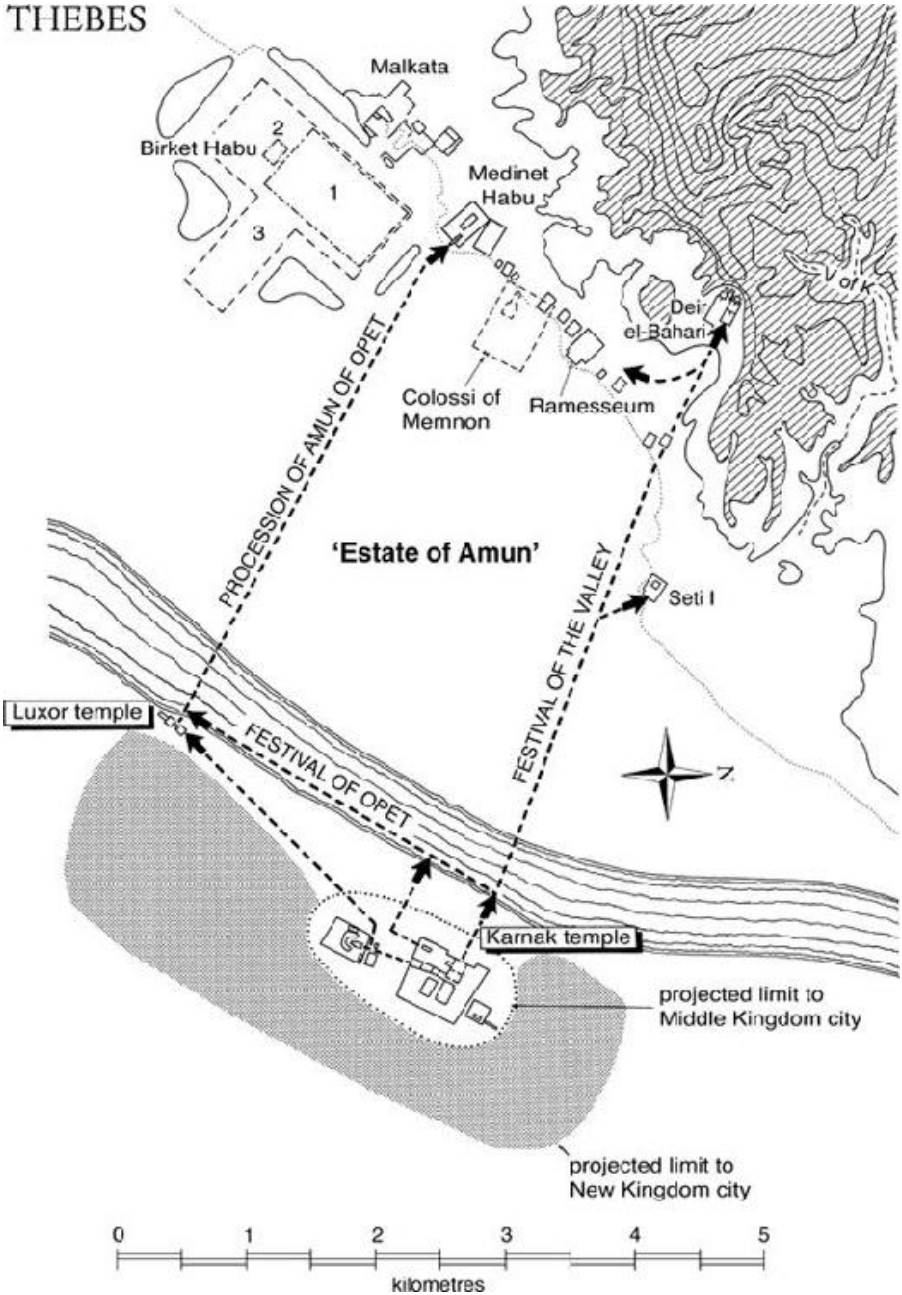


*Figure 6.8*Map of Thebes, the 'Estate of Amun', in the New Kingdom, showing main temples and processional routes. The rectangles marked along the western desert edge are royal mortuary temples. 'VofK' = Valley of the Kings. For Malkata and the Birket Habu see Figure 6.12, p. 276. The numbered parts of the latter are as follows: (1) hypothetical first basin; (2) palace for the first *Sed*-festival; (3) probably second basin, defined by earth mounds. For a more detailed map of processional routes see L. Bell, in Shafer, *Temples*, 159, Fig. 65.

There is evidence at other sites to show that what happened to

Thebes in the New Kingdom was not unusual. The period seems to have been characterized by urban renewal. For the Middle Kingdom, we can speak of urbanization as a policy of the state, achieved by laying out planned settlements which in their rigid grid plans reflected an intense bureaucratic control of society. Urban renewal in the New Kingdom displays far less of this, and may have arisen as a consequence of the redevelopment of key sites within towns as temple precincts. Provincial temple building on a grand scale became a priority of state expenditure in the New Kingdom for the first time; the rebuilding of towns and cities, in a more open style which reflected the changed nature of Egyptian society, was a by-product which became generally desirable in itself.

The main part of the temple of Karnak was constructed during the Eighteenth Dynasty, surrounding on four sides the old Middle Kingdom temple that had an alignment which approximately followed the main axis of the planned Middle Kingdom quarter of the city and faced directly towards the river. Egyptian temples of the Eighteenth Dynasty display considerable variation and originality in design, and this is particularly true at Karnak. The layout is unique, both in its internal complexity and in the small allocation of open space (although this was allowed for in subsequent developments).[33] The central element was a shrine, open at both ends, which contained the portable barque by which the image of Amun could be carried outside the temple on important festivals. The present granite shrine is a very late replacement (by the Macedonian King Philip Arrhidaeus) of the New Kingdom original. In the reign of Tuthmosis III the main temple building was enlarged by about 50 per cent through the addition at the rear of a stone building that has come to be known as the 'Festival Hall' of Tuthmosis III, a building evidently designed for the celebration of the varied aspects of kingship (the performance of the *Sed*-festival included).

Somewhere in the grounds of Karnak temple lay a royal palace.[34] Its position changed during the New Kingdom as the temple was enlarged. It must have been built of mud brick for nothing has been found either of foundations or of loose stone blocks. But we are sure of its existence from references in inscriptions. In the case of Queen Hatshepsut, they are sufficiently explicit to suggest an actual location: in front of the Eighteenth Dynasty temple façade, on the north side of the temple axis. References to a palace at Karnak continue through the New Kingdom, even though by the mid-Eighteenth Dynasty kings were no longer residing at Thebes. The texts themselves make it clear,

however, that this was no ordinary domestic palace, but a ceremonial building used, for example, during a royal coronation. The king visited Thebes as the divine son of Amun. Wherever he was accommodated took on the character of a sacred building.

The Hatshepsut texts also reveal the political value of the Amun cult at Karnak. On various festivals, the portable barque containing the god's image was carried out of the main temple, borne on poles resting on the shoulders of temple staff and maybe other officials. This could be made the opportunity for Amun to perform a 'miracle'. A movement from the heavy wooden barque would be communicated to the shoulders of the bearers, and magnified so that a distinct deviation from the prescribed course occurred, and sometimes a dipping forwards of the shrine. The texts also claim that speeches were communicated from the god, but by what means is unclear. In this way Hatshepsut was publicly picked out by Amun and the miracle interpreted as being a divine choice of the next monarch.[35] Subsequently Tuthmosis III claimed that by a similar miracle at Karnak he also had been chosen by Amun.[36]

How should we react to claims of this kind? Should we be cynical and say that it was all made up afterwards for propaganda reasons? Should we be more broad-minded and consider that chosen people in a state of excitement might actually hear voices, or voice openly the urgings of their conscience? Or was there a device by which the god's voice was made to speak? The question is made more acute by a case where a king (Tuthmosis III again) claims that in the important cord-stretching ceremony preparatory to building a new temple at Karnak (his 'Festival Hall'), 'the majesty of this revered god (i.e. Amun) desired to do the extending of the line himself'.[37] How much deeply felt transcendental experience, as against cynical use of stereotyped religious phraseology, we think was present will depend very much upon the individual reader's own mind. It is not something that scholarly research can properly answer. What we can say is that statements of this kind make an ideological point, stressing the particular importance of the event in question. The reader is informed that the choice of the next king or the laying out of a temple (or the various other acts sanctioned by Amun's 'miracle') have the greatest authority that mind and vocabulary can convey. They demonstrate the legitimizing role of Amun and the use of the Karnak temple precinct as the proper arena for it.

The parading of the divine image was a basic part of temple life in ancient Egypt, Thebes in particular. We know this from the

architectural design of Karnak as much as from the scenes and inscriptions on the temple walls. From the New Kingdom onwards, almost as much attention and resources were directed towards laying out processional routes as to the temples themselves. Processional routes were, ideally, paved with stone, lined on both sides with sphinxes or similar statues, and punctuated at intervals by rest-stations or way-stations: small formal shrines or temples set perpendicularly to the route and designed to accommodate a portable boat shrine on a square stone pedestal. They, too, were called 'tent shrines of the god' (*seh-netjer*). The physical demands of reverently carrying a heavy wooden boat shrine may perhaps have dictated the intervals between way-stations if not the actual practice itself. At Karnak one such route ran from the front of the temple westwards towards the river, ending in a stone quay above a basin at the head of a canal. In the Nineteenth Dynasty, this was shortened by the building on its line of the Great Hypostyle Hall and the Second Pylon, which became the new front to the temple. A second processional route was laid out in the Eighteenth Dynasty to run southwards from the then temple front (Figure 6.2, p. 251 and Photograph 6.1, p. 249). It was given a particularly handsome and impressive appearance. By the time of Horemheb it consisted of four pylons separating as many courts, with obelisks, flagpoles and colossal royal statues in front of the pylon towers, and a way-station and royal jubilee hall built into the courtyard sides. Beyond the last pylon (no. 10 in the Karnak series) the route continued for a further 350 m, lined with ram-headed sphinxes of the reign of Horemheb and flanked with two way-stations, until it reached a separate temple, belonging to the goddess Mut who, in the New Kingdom, was held to be Amun's consort. A third avenue, lined subsequent to the New Kingdom with reused stone rams of Amenhetep III's reign, ran on an almost parallel course from the temple of Khonsu, who, as the son of Amun and Mut, completed the Theban divine family. The present building dates to the Twentieth Dynasty. This avenue is thought also to have ended in a quay above a basin connected to the Nile.[38] Close by lay the beginning of another processional route that ran southwards for a distance of 3 km, finally ending in front of the temple of Luxor. The sphinxes that now line this route date only to the Thirtieth Dynasty, but a source from Hatshepsut's reign shows that the route must have been marked in some way in the New Kingdom.

The festivals of Thebes were many, and the larger ones involved the temples in considerable extra expenditure in 'offerings', which, by

means of the 'Reversion of Offerings', were distributed as extra rations to the temple personnel and others involved in the festivals. As examples we can quote a damaged text of Tuthmosis III from his Festival Hall at Karnak that listed 54 feast days each year,[39] which compares with the 60 listed at Medinet Habu in the time of Rameses III.[40] For the quantities of offerings, the Calendar of Feasts and Offerings at Medinet Habu gives us as a minimum basis for some of the regular monthly feasts 84 loaves of bread and 15 jars of beer, but rising steeply for more favoured feasts to 3,694 loaves, 410 cakes and 905 jars of beer in the case of the Festival of the god Seker.

The processions of images of the divine family of Thebes and of other sanctified beings (including statues of kings of olden times) setting forth from the huge brightly painted temples, and making their slow progress along formally arranged avenues with carefully stage-managed halts at intermediate stations, and the occasional excitement of a 'miracle': all this brought to the city as a whole spectacle and munificence which regularly reinforced the physical and economic dominance of the temples. And for the greatest of the festivals the king came to Thebes in person to be at the centre, and to absorb some of the power that the occasion generated.

This most important of festivals was the Festival of Opet.[41] It happened every year, in the second month of the season of Inundation. In the mid-Eighteenth Dynasty it lasted for 11 days. By the end of the reign of Rameses III in the Twentieth it had been lengthened to 27 days. At that time at Medinet Habu the festival was celebrated by the distribution of 11,341 loaves, 85 cakes and 385 jars of beer. The core of the festival was an unusually long procession of images. The route lay between Karnak itself and the temple of Luxor (Figure 6.8, p. 264). In the time of Hatshepsut the outward journey was made by land, using the newly built southward extension of courts and pylons at Karnak, pausing at six way-stations on the way, whilst the return journey was by river. By the late Eighteenth Dynasty both the outward and return journeys were being made by river. Each of the deities travelled in a separate barge, towed by smaller boats and by gangs of men on the bank, who could include high court officials, hauling on ropes. It was one of the occasions when the public could present pleas to the gods before their portable barques, and before colossal *ka*-statues of the king (see below for the meaning of *ka*). Detailed scenes of the processions, depicting also the soldiers, dancers and musicians who followed the progress of the barges from the bank, were carved on the walls of Luxor temple, the destination of the

festival.

The present Luxor temple is largely the work of Amenhetep III and Rameses II. In facing towards Karnak rather than towards the adjacent river it proclaims its dependence upon Karnak. Indeed, the temple seems to have existed primarily to create a suitably monumental setting for the rites in which the annual Opet festival culminated (Figure 6.9).[42] These rites addressed the fundamental problem which sublime authority inevitably creates: how to reconcile the humanity of the current ruler with the divinity of his office.

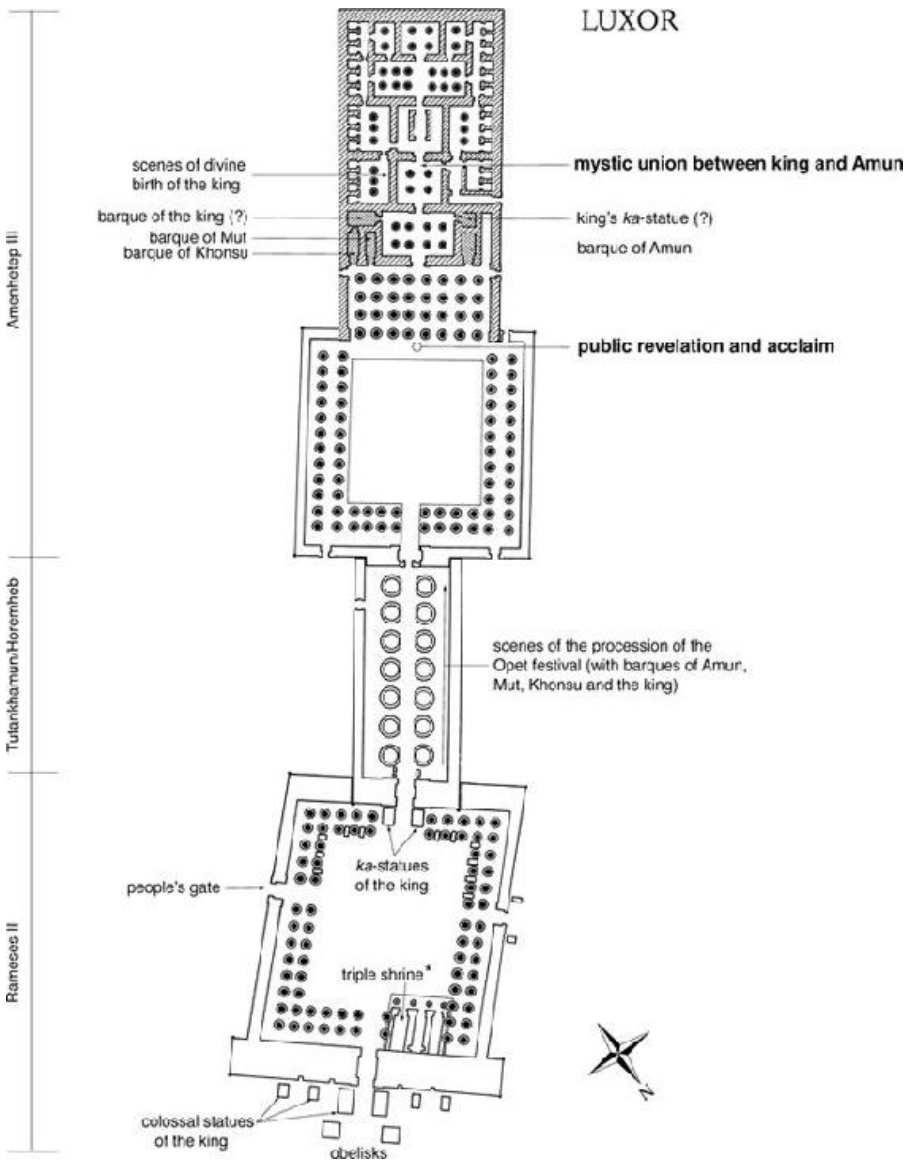


*Figure 6.9*Luxor temple: centre of the mystic relationship between king and the god

Amun, and focus of the Opet festival. The cross-hatched part at the rear is the earliest, and remained the sacred precinct in which the union between king and god took place each year. '*': the triple shrine in the outer court, originally a way-station from the time of Queen Hatshepsut, contained more *ka*-statues of kings, and was a place for prayers and petitions by the people, hoping for an oracular response. The temple served as a place of coronation for at least one king, Horemheb. For a more detailed plan with labelled parts see L. Bell, in Shafer, *Temples*, 149, Fig. 56.

We have already examined the process by which divinity was first infused into a mortal child destined to become king. It was explained in a rather literal way, as brought about by a sexual union between his mother and the god Amun who had temporarily assumed the form of his father. One set of scenes illustrating this occurs in the inner part of Luxor temple (Figure 6.7, p. 261). However, the nature of that divine essence was also separately identified: it was the royal *ka*. All persons had a *ka*, fashioned at their birth from the invisible continuum of life-force and destined to exist forever. But, just as living kings belonged to the restricted uppermost band of the social hierarchy, so the *ka* of the king was part of the divine essence shared by gods and by the royal ancestors. Each new royal *ka*, created at the moment of the future king's conception (and depicted thus in the scenes of the king's divine birth), represented the next encapsulation of divine power in the sequence that stretched back through the long line of ancestral kings to the period when the gods had ruled in person. The indestructible royal *ka* existed in parallel to the life of the living king, its earthly manifestation, and gave the king his legitimacy. It was, of course, only an idea, but it was given a greater semblance of reality through public performance. Luxor temple was where it was staged, its decoration giving great prominence to the king's *ka*. The mighty procession of the Opet festival took the king to the temple. Leaving the crowds outside he entered and proceeded in the company of priests to the enclosed chambers at the back. There, in a charged incense-laden atmosphere and the mystic presence of the god Amun (and his ithyphallic manifestation Amun-Min), the king and his *ka* were merged, and the king's person transformed. When the king reappeared, he did so miraculously transformed into a divine being, 'Foremost of all the living *Kas*.' His reappearance in public freshly transfigured was the real climax, the moment of cheering which implied that the miracle had worked and had been accepted as having worked. Luxor temple was, in the words of its original builder (Amenhetep III), 'his place of justification, in which he is rejuvenated; the palace from which he sets out in joy at the moment of his Appearance, his transformations visible to all'.[43] Luxor temple

provided for the king the essential setting for the interplay between the hidden and revealed aspects of a divinity that other temples did for images of the gods.

The annual festival centred on the presence of the king in person. By the mid-Eighteenth Dynasty kings were no longer residing at Thebes. They lived for the most part in the north of Egypt, particularly in the palaces at Memphis. The royal participation every year in the Opet festival thus came to involve a state progress upstream that spread the public acclamation further, and grew into an institution in itself. The job of feeding the court during the many overnight stops there and back fell to the mayors of provincial towns, and by the late Eighteenth Dynasty this had become a burden that required a royal edict to correct (see p. 297).

The merging of the king with the god Amun and all his pageants had the important consequence of drawing a line between politics and myth. The royal succession could go badly wrong, some could even plot to kill the king and replace him with another (as happened with Rameses III). But behind visible reality lay an immensely weighty edifice of myth, festival and grand architectural setting that could absorb the petty vagaries of history and smooth out the irregularities. It guaranteed the continuity of proper rule that was so important an element in the Egyptians' thinking. In particular, it could convert usurpers (or new blood, depending on one's point of reference) into models of legitimacy and tradition. Horemheb is a prime example. The Eighteenth Dynasty ended with the royal line petering out in the aftermath of the Amarna Period. The throne passed to an army officer, the general Horemheb, who had risen to prominence in the reign of Tutankhamun. By lineage he apparently was not royal. He was part of the court at Memphis, and during this time saw to the completion of a handsome tomb for himself and his family in the court cemetery at Saqqara. His elevation to the kingship is recorded in formal texts. These go so far as to recognize the early part of his life when he was 'supreme chief of the land' and an adviser to the king. When, through the machinations of court politics, and the leverage that his leadership of the army bestowed, he became king himself, his coronation was carried out at Karnak and Luxor as part of the Festival of Opet of that year. As the texts describe it the whole coronation ceremony was integrated with the Opet festival so that the great Karnak–Luxor procession became a celebratory parade for the newly validated king.[44]

The Theban city of the dead

Karnak, Luxor and the city of Thebes proper lay on the east bank of the Nile. Across the river on the west bank the New Kingdom witnessed the large-scale development of a city of the dead. From the beginning of the Eighteenth Dynasty kings abandoned the building of pyramids in the Memphite area. They put their tombs at Thebes, and their successors continued to do so until the very end of the Twentieth Dynasty. But now the nature of the royal tomb was very different. The new-style burial place was a catacomb dug into the desert hills in the Valley of the Kings, its security dependent mainly upon the careful policing of the area. It lay quite separate from the all-important offering-cult that was now housed in a temple lying beside the alluvial plain. The change involved a fundamental revision of the symbolism of the royal tomb, affecting the relationship between king and supreme deity. In the new tombs the king's body and statue cult were no longer subsumed into a gigantic image of the sun-cult, the pyramid. The only architectural gesture now made to the cult of the visible sun was an open court containing a platform and stairs built into the back of the new temples. Instead, the new temples proclaimed the centrality and supremacy of Amun.

Although we are accustomed to speak of these temples as being royal mortuary temples, they were in reality temples dedicated to a specific form of the god Amun with whom the king became fused both in death, through the presence of his images within their own shrines, and in life during his visits to the temple.[45] At Deir el-Bahari there was Amun 'Holy of Holies', at the Ramesseum (mortuary temple of Rameses II) Amun 'within United-with-Thebes' (the ancient name for the Ramesseum), and at Medinet Habu Amun 'of United-with-Eternity', the ancient name for Medinet Habu. Each of the mortuary temples was really an Amun temple in which the form of a particular king had taken up residence. This is very apparent from the architecture of the better-preserved ones. Those of the Nineteenth and Twentieth Dynasties (of Seti I, Rameses II and Rameses III) reserved the rear central chambers for the cult of Amun, centred not only on a permanent statue image but also on a portable boat shrine kept within a pillared hall with central pedestal. For the Eighteenth Dynasty only the temple of Hatshepsut preserves sufficient of its masonry, and here, behind the centre of the upper terrace, a rock-hewn sanctuary housed the image of Amun. The king who had commissioned the temple naturally had a prominent part in the temple cult, to the extent that,

to judge from texts preserved at Medinet Habu, his spirit was thought to merge with that of the local form of Amun. The mortuary temples catered for other aspects of ideology, too. As just noted, the old cult of the visible sun was given an open court on the north side equipped with a stone platform reached by steps, a construction which the Egyptians rather oddly called a 'Sunshade' or 'Shade of Ra', and from the top of which solar hymns were declaimed. A room or suite of rooms to the south of the Amun sanctuary accommodated the cult of historical continuity, in the form of the king's father and sometimes his ancestors as well. Yet another portable boat shrine stood here.

The network of Amun's connections to the west bank of Thebes was expressed through more processions. Once a year, roughly five months before the Opet festival, the 'Festival of the Valley' took place.[46] In this the images of Amun, Mut and Khonsu, the divine family of Thebes, were brought from Karnak and ferried over the river. Once across they continued their journey by either road or canal to Deir el-Bahari, site of the ancient mortuary temple and tomb of King Menthuhetep II of the Eleventh Dynasty (Figure 3.23, p. 157) and of the recent mortuary temple of Queen Hatshepsut. Deir el-Bahari lies almost exactly opposite Karnak so that the whole journey could have been accomplished along a single line. However, as the New Kingdom progressed the route was extended so that the portable barques with their statues could rest overnight in the mortuary temple of the reigning king. On the next day the procession returned to Karnak. Although it was a much shorter festival than that of Opet it was highly regarded and was the occasion for families with relatives or ancestors buried in the Theban hills to make their own journey to the family tomb, to have a meal there, and to stay overnight.

A lesser but more frequent connection between east and west banks was maintained at a small temple built (or rebuilt) at the southern end of the Theban necropolis in the time of Tuthmosis III, beside the space which later would be occupied by Rameses III's mortuary temple of Medinet Habu.[47] The shape of the temple was standard for its day, but its innocuous form disguised the fact that it was regarded as embodying yet another of the primaeval mounds on which creation had first taken place. It was 'The Genuine Mound of the West', a name which probably also conveyed the notion that original creation and the rebirth of the dead in the western desert cemetery were linked. Inscriptions from the Twenty-first Dynasty reveal that every 10 days (the normal length of a working 'week' in ancient Egypt) the image of Amun of Opet (Luxor) was brought across to visit this temple, and it is

likely from inscriptions at Luxor itself that this custom extends back to at least the time of Rameses II.

When the routes of these processions – the festivals of Opet and of the Valley and the regular trip to Medinet Habu – are marked on a map they form a pattern: a processional perimeter to Thebes (Figure 6.8, p. 264). To see the Theban temples on east and west as parts of a master-scheme is not just modern fancy. Certain brief texts, particularly names specifying certain buildings or building parts, reveal a distinct parallelism in Egyptian thinking between the mortuary temples on the west and Karnak and Luxor on the east, a parallelism that the processions of boat shrines articulated.[48] The master-scheme, the unitary overview of the sacred places of Thebes, is summed up in the fact that all of them belonged to the 'Estate of Amun'. Its realization on the ground, however, also reveals the limits of New Kingdom area planning. There was no attempt to build on the legacy of the Middle Kingdom by extending the overall planning of a settlement to the premeditated arrangement of a huge complex of temples and tombs. Individual Theban temples impress us with their carefully symmetrical layouts. But their particular locations seem to have depended largely on local factors of mythology or convenience, giving rise to an *ad hoc* landscape of temple architecture. This was where the processional avenues made their contribution, binding the disparate parts together and creating a semblance of unity.

Just as Karnak and Luxor provided an important ceremonial opportunity for the king, so also did the mortuary temples on the west bank. From the time of Horemheb onwards each contained a small palace situated near the front of the temple (Figure 6.6, p. 259 and Photograph 6.3).[49] It offered limited but evidently adequate accommodation for the king and his entourage during his visits to Thebes. The best-known example, at Medinet Habu, has two entrances to the inner part of the palace and each is graced with a scene of the king making an entrance, in the one case 'to see his father Amun in his feast at the beginning of Opet' and in the other 'to cause his father Amun to appear in the Feast of the Valley'.[50] The mortuary temple palace was always on the south side, and where it faced into the temple forecourt or towards the avenue leading into the temple it possessed a formal balcony, the 'Window of Appearance' (Figure 6.10; for others, see Figures 1.2 and 8.8, pp. 28 and 338). This was the setting for a reward ceremony that, in view of the Theban festival programme, would have occurred no more than once or twice a year. A cushion was laid on the sill of the window itself, courtiers and high

officials were led before it, and rewards and honours bestowed on them. This Theban reward ceremony was only a local version of a general gift-giving ceremony that later New Kingdom Pharaohs indulged in. The Edict of Horemheb describes in glowing terms how the army unit temporarily serving its ten-day period of guard duty in the palace was given special extra rations at a reward ceremony performed at the Window of Appearance, a pointer to the way that at least the outer parts of these great temples were not exclusively for ceremonies centred on the gods.[51]

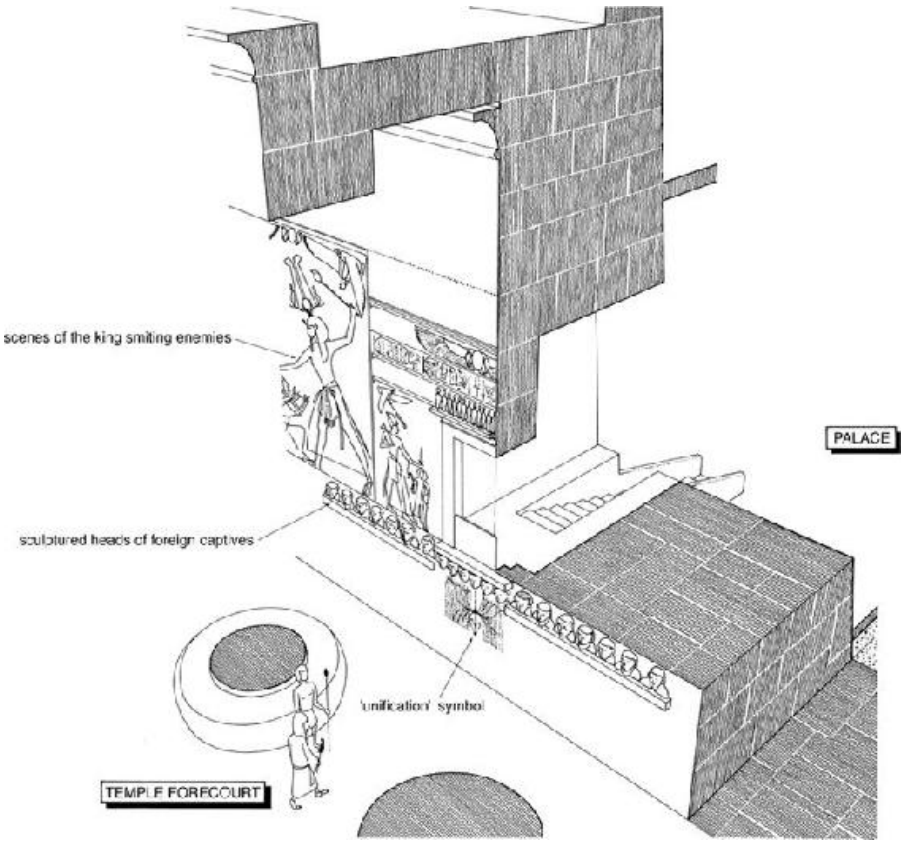


Figure 6.10 Theatrical setting for the 'appearance' of the king: the symbol-laden ornamental palace balcony, the 'Window of Appearance' of Pharaoh. This slightly restored version is from the first palace at Rameses III's mortuary temple, Medinet Habu, western Thebes, after Hölscher, *Mortuary Temple* I, Ch. II. See Photograph 6.3, p. 272, for a photograph of the remains of the rear part of the palace.

*Photograph 6.3*Part of the small palace attached to the south side of the mortuary temple of Rameses III at Medinet Habu, western Thebes. The walls are partly restored.

Amenhetep III's Sed-festivals

The Egyptians had a genius for adapting old styles to new requirements. New Kingdom Thebes was the product of a society that had changed significantly since the great age of pyramid building. But in the appeal to traditions the Egyptians found legitimacy for novelties.

As was discussed in the earlier chapters, some of the earliest intelligible monuments to kingship concerned the celebration of the earthly power and vigour of kings, the *Sed*-festival. In the New Kingdom, it was still as prestigious an occasion as ever; but typically, although they would never openly admit to it in formal texts, the Egyptians invented new forms of pageantry and adapted the symbolism to the changed environment. The best-known case is the set of three *Sed*-festivals celebrated by King Amenhetep III in the twenty-ninth to thirtieth, thirty-fourth and thirty-seventh years of his reign. The choice of these particular years was not wholly a personal matter. The *Sed*-festival had come to be (though it had not always been) a celebration of 30 years of reign in the first instance. But thereafter, kings were free to hold repeats at frequent intervals. Amenhetep III's jubilees are of special interest because of the survival

of the actual site where at least the first two were celebrated. It now bears the name Malkata, and lies on the west bank of Thebes, to the south of the line of mortuary temples and the Theban processional perimeter (Figures 6.8, p. 264, 6.11 and 6.12).[52] In being a kind of festival showground created for great pageants of kingship it offers a vivid and somewhat unconventional example from archaeology of the profligacy in the use of resources characteristic of despotic states at the height of their powers.

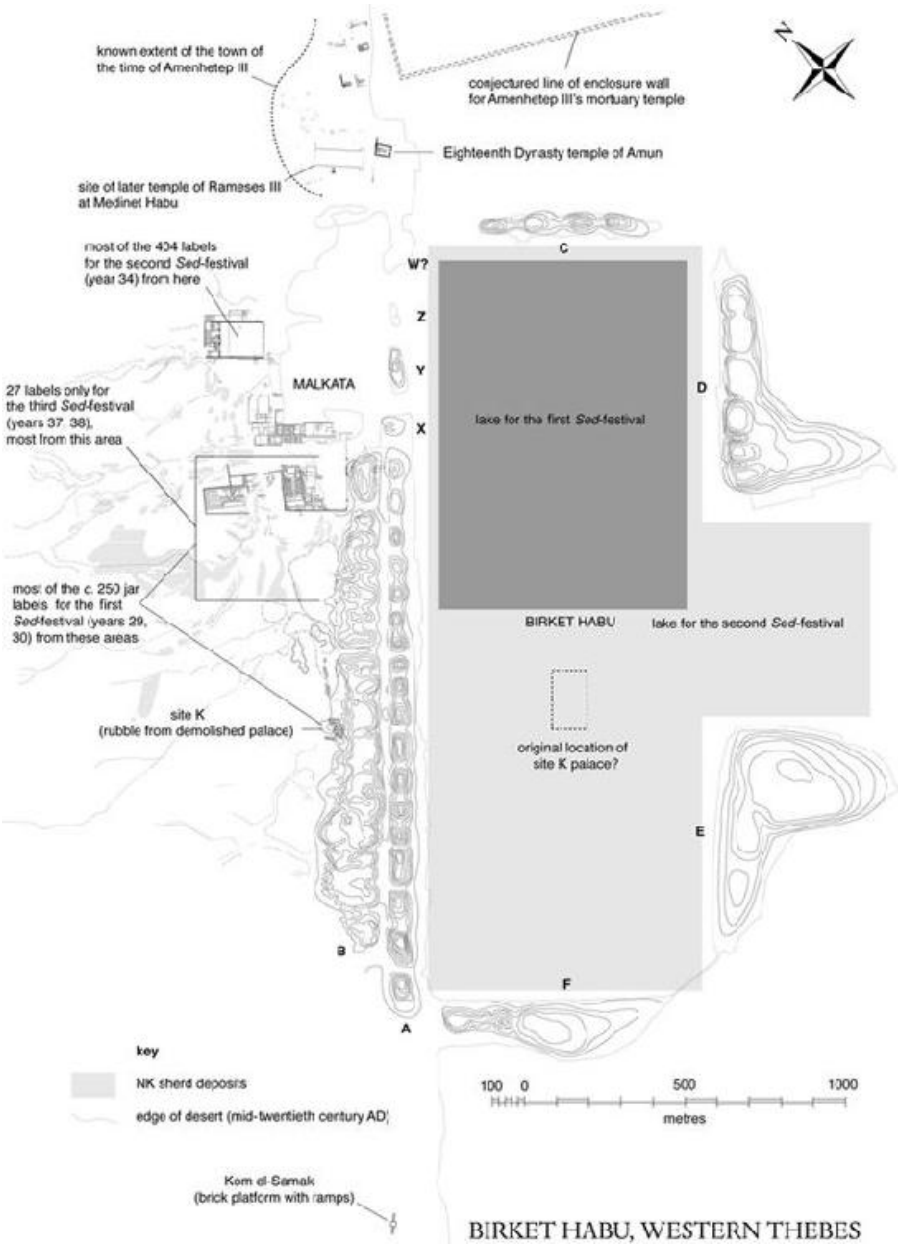


Figure 6.11 A setting for pageantry: Amenhetep III's sacred lake, the Birket Habu, and adjacent palace town (Malkata) at western Thebes, and the probable site of the celebrations of the king's first and second *Sed*-festivals. The map has been built up from a variety of sources, including aerial photographs, Google Earth images and notes and measurements made during a survey and excavation of the site for the University Museum of Pennsylvania in the 1970s. Letters in bold type refer to single or to groups of mounds of ancient spoil surrounding the Birket Habu. The distribution of hieratic labels is derived from Hayes, *JNES* 10 (1951), 84–5; Leahy, *Malkata*, 1–4. The fragmentary building remains of the town of the period in the area of Medinet Habu are mapped in C. Robichon and A. Varille, *Le temple du scribe*

royal Amenhotep, fils de Hapou I, Cairo, IFAO, 1936, Pls V, IX; Hölscher, *Medinet Habu* I, *passim*.

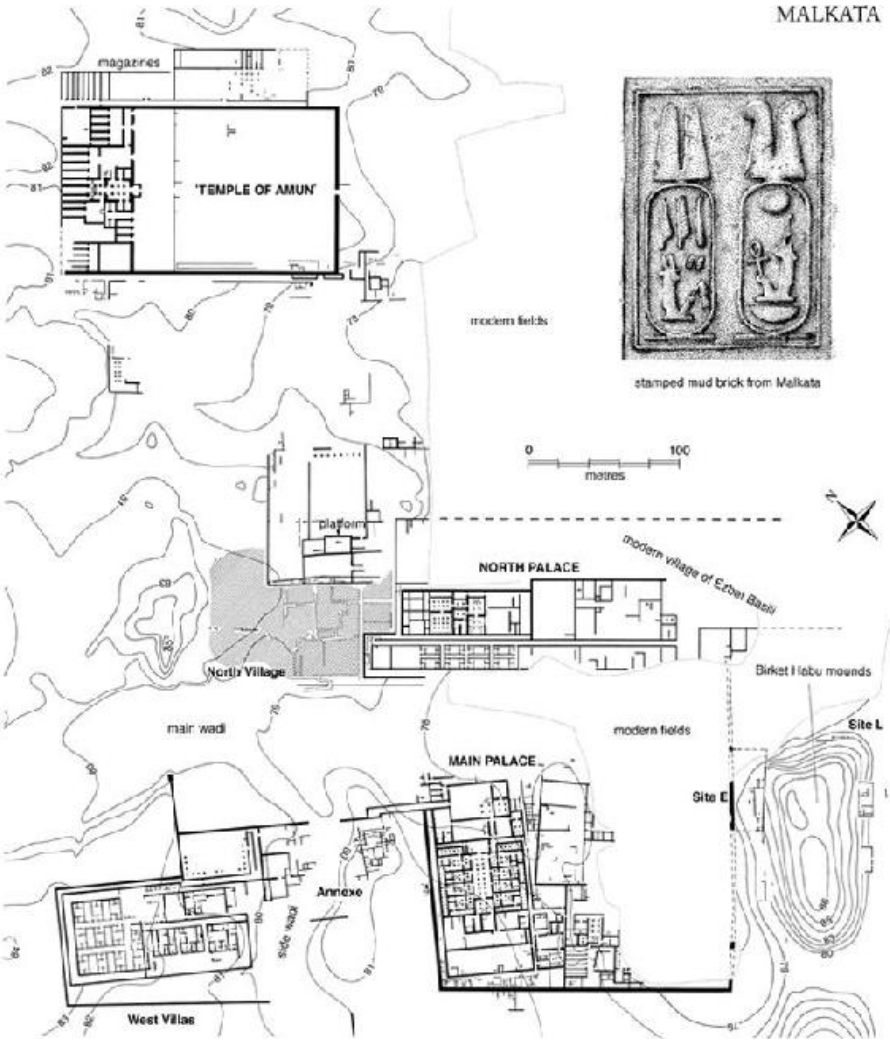


*Figure 6.12*A more detailed plan of the buildings of Malkata, using material contained in Lacovara, *Royal City*. The stamped mud brick records, on the right, the name Nebmaatra (prenomen of Amenhetep III) and, beside it on the left, the name of his wife, Tiy. Drawing by A. Boyce.

The classic *Sed*-festival was, as pointed out in Chapter 2, itself an amalgamation of two separate events, the *Sed*-festival proper and the ceremony of territorial claim. Early royal funerary architecture, best exemplified by the Step Pyramid at Saqqara, created a setting for both festivals in which one crucial part was a large arena where the king would run a sacred course (Figure 2.22, p. 103). At Malkata this part was transformed into a water ceremony. A huge artificial basin, now

known as the Birket Habu, was dug where the floodplain met the desert, designed in the shape of a modern letter 'T'. This was the common shape for small tanks and pools containing pure water. By the end of the king's reign the Malkata basin had been enlarged to the extent that the main part measured 2 × 1 km. The earth dug out from this stupendous hole in the ground was partly spread out to make an artificial terrace on which the king's mortuary temple and part of the adjacent palace stood, and was partly heaped up into rows of artificial hills. Remnants of this early example of landscaping still survive. A contemporary Theban tomb, belonging to a high court official called Kheruef, has left a brief and very stylized description of this principal event from the king's first jubilee:

> The glorious appearance of the king at the great double doors in his palace, 'The House of Rejoicing'; ushering in the officials, the king's friends, the chamberlain, the men of the gateway, the king's acquaintances, the crew of the barge, the castellans, and the king's dignitaries. Rewards were given out in the form of 'Gold of Praise', and ducks and fish of gold, and they received ribbons of green linen, each person being made to stand according to his rank. They were fed with food as part of the king's breakfast: bread, beer, oxen and fowl. They were directed to the lake of His Majesty to row in the king's barge. They grasped the towropes of the Evening Barge and the prow rope of the Morning Barge, and they towed the barges at the great place. They stopped at the steps of the throne.
> It was His Majesty who did this in accordance with the writings of old. (Yet) past generations of people since the time of the ancestors had never celebrated such jubilee-rites.[53]

The Evening and Morning Barges carried divine statues, and were so called because they were supposed to be imitations of the heavenly barges in which the sun god made his daily journey. Elaborate water processions had become part of the tradition of celebration at Thebes (using the River Nile), and now provided the model for the *Sed*-festival. The last piece of the text catches the Egyptian approach well: it was novel, an invention of the day, yet in accord with people's feeling for tradition.

The ability to invent with sound historical taste is illustrated by another of Kheruef's scenes of Amenhetep's *Sed*-festivals. In this the king is shown ceremonially raising into an upright position a carved

pole called a *Djed*-pillar.[54] The pillar had the form of a hieroglyph that wrote a word which meant something like 'stability', and the act of raising it belonged to the range of symbols and ceremonies which encouraged orderliness in society. More specifically, by this time it was regarded as a symbol of resurrection and was thus associated with Osiris, god of the dead. Amenhetep III's master of ceremonies evidently felt it to be entirely fitting to add the *Djed*-pillar ceremony to the jubilee festival, although historically there was probably no connection. This kind of interchangeability of ideas and forms made it relatively easy to invent new combinations by stirring the pot of tradition. Scenes of the festival in Amenhetep's own temples (as distinct from those in Kheruef's tomb), however, appear to be more traditional.[55]

The texts mention a palace. Another scene in Kheruef's tomb shows king and queen emerging from it.[56] This first appearance at the palace door on jubilee-day, clad in the special jubilee costume, was another vital moment imbued with great significance. It was also truly traditional, since at the Step Pyramid this moment of first emergence from the palace seems to be commemorated. It was not the regular royal palace, however. Malkata was a site specially developed for this festival. So beside the ceremonial lake a special palace was built, of mud brick, its walls brightly painted with scenes and colourful designs. The food and drink for the celebrations were delivered to it in pottery amphorae whose tall mud stoppers bore the impressions of wooden stamps that recorded the occasion. The festival day arrived, the amphorae were opened by having their tops expertly knocked off in one piece, the celebrations took place, and then the palace was closed for the last time. Within a short time work resumed on the lake, to enlarge it in time for the next jubilee. The palace stood in the way, so it was demolished and its rubble, mixed up with all the broken amphorae, was carried across to the desert and dumped there. This mixture of bricks, painted wall plaster and broken empties was partially excavated in 1973 (Figure 6.11, p. 274, marks the place, Site K).

For the next jubilee, four years later, a new ceremonial palace was built, again of mud-brick. This one was left standing. The ruins, still with hundreds of fragments of leftover amphorae from the king's jubilee meal, were excavated in 1916. The plan of the building resembles a temple, complete with a small hypostyle hall and group of sanctuaries, and this likeness was made explicit by stamped bricks used in the construction which refer to 'The Temple of Amun in the

House of Rejoicing'. This last element in the name, it will be recalled, occurred in the Kheruef text quoted above. On such an august occasion the distinction between king and god, and the architecture that went with each, became quite arbitrary, just as at Luxor temple, which was built primarily as a setting for an annual royal ceremony. It also emphasizes how, even in the ancient *Sed*-festival rites that had no historical connection with either Thebes or its gods, Amun had been inserted to play the dominant role.

The royal family, the court, the servants who fed them and the workers who kept them supplied with whatever was necessary – including glass vessels and glazed trinkets – were housed for the duration of the celebration in a large central complex of palaces, villas and houses. The main palace contained the king's bedchamber and bathroom behind a formal arrangement of halls that included several suites for individual members of the royal family. Much of this building was painted with scenes from nature. Not far away a natural elevation of the desert formed the base of a brick dais facing a courtyard where perhaps the king could receive the more important visitors to his feast.

A pageant on water, distribution of gifts and a special meal, the erection of festival buildings and the assembling of dignitaries and foreign envoys and representatives: here are the ingredients for the archetypal state jamboree. Nor was it necessary to wait for a king blessed with longevity to reach his thirtieth year. The festivals of Opet and of the Valley were almost as grand.

The integration of king and temple cult of Amun enveloped the person of the king in an elaborate cocoon of mystery and pageant. It successfully blurred the difficulty that people might have in reconciling the divine and earthly aspects of a ruler who was also the head of a series of powerful institutions. For a brief time, however, it looked as though this compromise was only an intermediate stage in the evolution of a charismatic monarchy that sought the same level of adulation, but now directly focused on the king without the obscuring veil of mystery. This brief time was the reign of King Akhenaten, late in the Eighteenth Dynasty (Chapter 8). Although Akhenaten's twin visions of a monarchy worshipped for itself, and of a rationale that was so simple and direct as to release the king from the shrouds of mystery, failed to convince his contemporaries and died with him, it offered a glimpse of a future that is still with us. Akhenaten's kingship provides an unintended caricature of all modern leaders who indulge in the trappings of charismatic display. The Egyptians themselves did

not like what they saw. It evidently offended their sense of good taste. After his death, they returned to intellectual compromise and wrapped again the nakedness of monarchy in the shrouds of transcendental imaginings.

Secular powers

Akhenaten's reign of 17 years without the support of the traditional temple establishments and all the colourful shows that they could provide, and the failure of this new style after his death which can by no means be described as a vengeful triumph of the priesthood, brings into focus two further institutions within New Kingdom society: the palace and the army.

In terms of bricks and mortar 'palace' is a useful designation for any distinctive building in which a king or even a non-royal person stayed, even if for a short time. It has come to be used, for example, for the residences of local governors or mayors, for example, at Tell Basta in the Middle Kingdom (Figure 5.24, p. 240). Egyptian kings travelled inside their country frequently and extensively.[57] If the journey was not on a regular route temporary accommodation could be in a tented encampment, as was used by Akhenaten on his first prospecting visit to Amarna.[58] But for scheduled journeys where something was constructed in order to provide accommodation, even for an overnight stop only, the building would, of necessity, have had a certain degree of formality (with a throne room, for example) that attracts the modern word 'palace' when the remains are excavated. There were probably at any one time in ancient Egypt a very large number of 'palaces', ranging from overnight lodges or rest houses, which could be quite small, to great sprawling complexes at major cities, which a Pharaoh might have thought of as 'home' (Malkata, Figures 6.11, 6.12, pp. 274 and 276, might count as one, although only used for jubilee-festival seasons). When one adds to this the fact that from their unique position kings can build palaces stamped with an individuality lying outside the norms of the architecture of the day, reflecting considerations that may amount to whimsy, it is hardly surprising to find that the excavated New Kingdom palaces fit less into the kind of standard pattern that one can recognize in temples and tombs.

Most journeys within Egypt used the river extensively. The small overnight palaces on royal routes were therefore sometimes called

(perhaps often metaphorically) 'The mooring-places of Pharaoh'. The term 'rest house' perhaps renders the sense best into English. River travel did not necessarily cramp the king's style: one model letter commanding preparations for the king's arrival at the riverine rest houses shows that a force of chariotry was expected to be with him.[59] Provisioning the rest houses exposed an administrative problem: how to cater for the occasional and not necessarily regular excesses of a brief royal passage. A partial solution lay in allocating to them farmland so that a permanent income maintained a small staff and its surplus could be stored in granaries ready for the direct feeding of the king's party and presumably for use in barter to purchase the extras which the farm did not produce itself. A group of 'mooring-places of Pharaoh' in Middle Egypt are known from the Wilbour Papyrus, a massive document on land rents.[60] One lay near the harim-palace of Medinet el-Ghurab (Gurob), another was at the city of Hardai on the Nile. This one owned 401 *arouras* of land (about 110 hectares). It is hard to imagine, however, that such a simple device solved the problem. Some kings were more extravagant than others, or might travel with a harim of excessive demands (remembering that the harim was a semi-independent institution with its own officials). The model letter of command to a local official in charge of some royal rest houses is notable for the range of its list of demanded commodities. Being a model letter we can suspect an element of vocabulary practice, but New Kingdom Pharaohs were not modest in their tastes. This is the sort of point at which the only solution for the hard-pressed official in charge was to go out and to commandeer extra supplies from other institutions and risk the heavy penalties laid down in royal decrees intended to protect individual institutions (such as the Nauri Decree, described in the next chapter, p. 298).

A good compromise was to make the mayor of the local town responsible. An excessive use of this device was corrected in the Horemheb Edict (see Chapter 7, p. 297). Ancient Egyptian mayors are an interesting group. In earlier periods, they had been all-powerful locally, commonly holding the office of 'Superintendent of staff/Chief priest' in the town's temple as well. To some extent they lay outside the regular bureaucratic systems, and did not possess a hierarchy of their own officials. Their power must have lain in the respect and influence they commanded by virtue of local landownership and family ties and a network of patronage and obligation. Although they had no bureaucracy of their own theirs was normally the responsibility for seeing that local taxes were collected and delivered

to the vizier, the king's chief representative. They presumably acted as a buffer between the external demands of the state and the wellbeing of the local community of which they were the symbolic head. For making up a shortfall in supplies for a sudden royal arrival who better to lean on but the local mayor? Another example of mayoral responsibility for keeping the palace in food will be cited shortly.

What did these royal rest houses look like? A fair guide is probably to be found in the small palaces attached to the west bank mortuary temples at Thebes, adding in a magazine and some kitchens and small houses for servants and caretakers (Photograph 6.3, p. 272, Figures 6.6, p. 259, and 6.10, p. 271). The model letter just cited refers several times to the existence of a special window at the 'mooring-place', which we should probably take as a 'Window of Appearance'. The fact that this was a standard feature of the west bank mortuary-temple palaces strengthens the case for using them as a model for this type of provincial royal rest house.

One example of a rest house, used apparently as a hunting-lodge, has actually been excavated. It dates to the later Eighteenth Dynasty and lay close to the Great Sphinx at Giza (Figure 6.13). Why here? By the New Kingdom the Great Sphinx – originally a statue of Khafra, the king who built the second pyramid at Giza – had been re-identified as a statue of the sun god Horemakhet ('Horus on the Horizon'), reflecting a habit of seeing conspicuous features of the desert landscape as images of Horus (and of Hathor also). Kings and private individuals honoured it with memorials large and small. Some of the stelae were set into the brick wall which was constructed around the edge of the newly cleared pit in the sand which had largely buried the body of the Sphinx. Amenhetep II built a special little brick temple not far from it. The site had an added attraction, too. The large stela in Amenhetep II's temple records how, when still a prince, he had exercised his chariot over the nearby desert. His son, the later Tuthmosis IV, went hunting for game, including lions, over the same ground. Just to the south of the Sphinx and incorporating the ruins of the ancient Valley Temple of Khafra, a small palace was built. Part of it resembles one of the larger houses atAmarna (Figure 8.12, p. 350); another (to the west) contained an inscribed stone door frame bearing the cartouches of Tutankhamun later usurped by Rameses II. Several wine-jar stoppers were recovered. The entire site was surrounded by a mud-brick enclosure wall with external buttresses, creating a royal park, a place for hunting and for contemplation.[61]

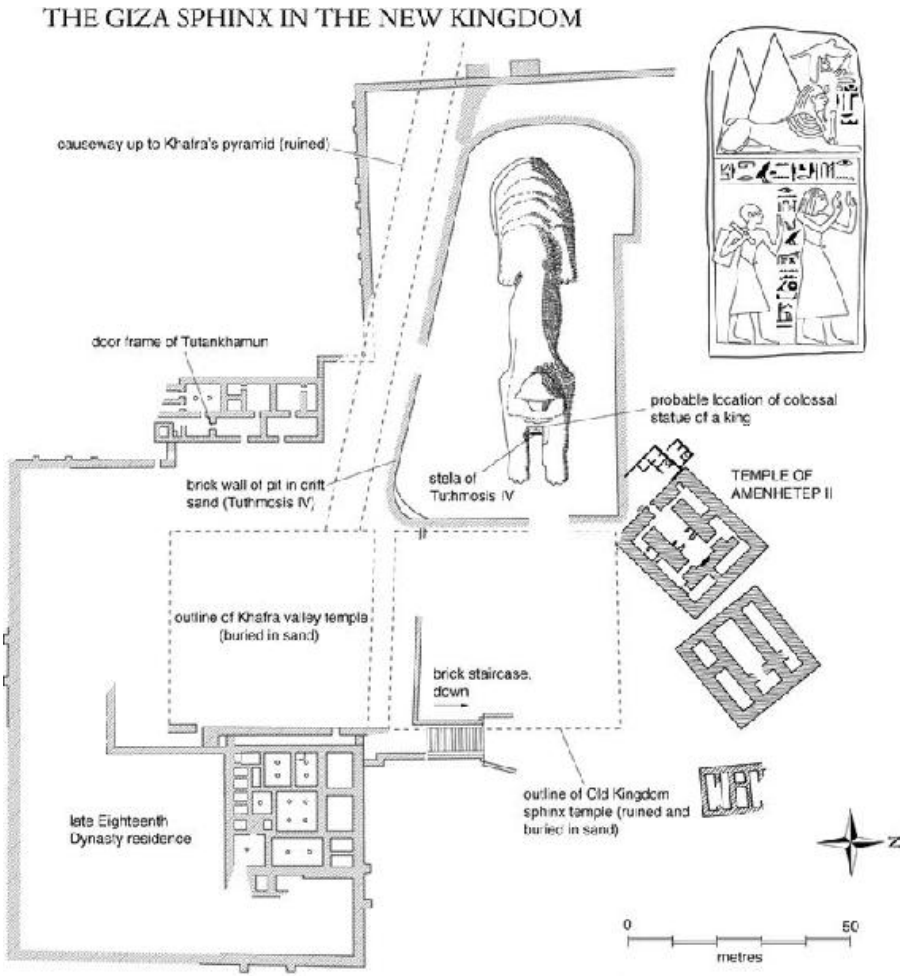


*Figure 6.13*Honouring and reinterpreting the past: New Kingdom activity at the Sphinx at Giza, which had become identified with the rising sun, Horemakhet ('Horus on the Horizon'). Kings built a small palace beside it, whilst the Sphinx itself attracted royal and private memorials. After Lehner and Hawass, *Giza*, 470, Fig. 19.2; also U. Hölscher, *Das Grabdenkmal des Königs Chephren*, Leipzig, Hinrichs, 1912, Blatt XV; Selim Hassan, *The Great Sphinx and Its Secrets*, Cairo, Government Press, 1953; H. Ricke, *Der Harmachistempel des Chefren in Giseh*, Wiesbaden, Steiner, 1970. The inset stela shows, at the top, the Sphinx, a standing statue between its paws and two of the nearby pyramids behind it. The Sphinx is entitled: 'Horemakhet, the great god, lord of the desert.' Below are figures of two men, the creators of the stela, 'The excellent scribe, Mentuher' and (behind him) 'The scribe Kamutnakhtu, justified.' It was found in sand filling the trench on the north side of the Sphinx. After Selim Hassan, *The Sphinx. Its History in the Light of Recent Excavations*, Cairo, Government Press, 1949, Fig. 12, pp. 58–60.

The archaeology of New Kingdom palaces is best illustrated at Akhenaten's new city of Amarna (Chapter 8), although the archaeological remains show that it is not so easy to be sure what we

mean by the term 'palace'. Outside Amarna the excavated evidence is less rich than one might have hoped. We know from texts that large residential palaces existed at Memphis and, from the reign of Rameses II onwards, at Per-Rameses (near the modern town of Qantir) in the eastern delta. So far the Per-Rameses palaces are represented by lengths of massive brick wall and the disembodied remains of a glazed throne dais.[62] Memphis has fared a little better. A fine reception hall belonging to King Merenptah, with the proportions and dignity of a temple, were excavated early in the twentieth century.[63] The clearest picture we have of the extent of a real residential palace outside Amarna comes from Malkata (Figure 6.12, p. 276), put up to accommodate Amenhetep III's huge entourage when it moved up to Thebes for his jubilee festivals.

One motive in the siting of some palaces seems to have been to create a retreat, away from the pressures of the full court and its administrators. One such retreat palace, or rather set of two palaces with accompanying villages, was built by the early Eighteenth Dynasty kings in the desert at Deir el-Ballas, 22 km north of Thebes.[64] Another is the palace at Medinet el-Ghurab, on the desert edge close to the entrance to the Fayum.[65] Built by Tuthmosis III it remained in use through the Amarna Period and beyond. It is a particularly interesting palace because it housed the senior royal women, with their own officials and servants and staff of weavers. It was a harim-palace where the occupants could live a secluded private life, and also bring up some of the royal children. At least one important Ramesside prince was buried there.[66] The atmosphere of personal scheming and political intrigue that such a place could engender need not be left only to the imagination. The greatest Pharaoh of the Twentieth Dynasty, Rameses III, vanquisher of foreign hosts, including the 'Sea Peoples', fell victim to a plot hatched in one of them. We know this from a surviving summary of verdicts from the trial of the conspirators.[67] A total of 31 men were implicated, together with six of their wives. All except four were executed or allowed to take their own life. The plot centred, however, on the women of the harim, and one named Teye, whose son the conspirators evidently hoped to make king. Although the son was amongst those found guilty, the harim women themselves seem to have been left alone. Who the male conspirators were is revealing: 11 were officials of the harim itself, 12 were officials or courtiers with other titles, only five were military men, and there was one priest. One of the soldiers, a captain of bowmen of Nubia, was involved because his sister who was in the

harim had written to him urging him to start an uprising. The study of history encourages us to look for explanations for change in terms of competing ideas, thus in the realm of 'politics'. But here, as must often have been (and still is) the case, the motive for attempted change was personal jealousy.

Provisioning the royal household involved not only getting supplies to a travelling pocket of gross consumption but also supporting permanent communities at the larger palaces that served as home bases. One of these was at Memphis. We have an important set of documents from the administration of the Memphis palace bread supply in the time of Seti I.[68] States one heading: 'Receiving wheat from the granary of Pharaoh in Memphis, in order to make it into loaves in the bakery which is under the authority of the mayor of Memphis, Neferhetep, to be sent over to the storehouse of Pharaoh.' There follow lists of daily amounts of between 100 and 190 sacks (about 7,300 and 13,000 l). A complementary list picks up the trail: 'Receiving the bread of the bakery which is under the authority of the mayor of Memphis, Neferhetep, at the storehouse of Pharaoh.' The quantities, received every few days, were usually between 2,000 and 5,000 small loaves. Note the way that the mayor of Memphis had been made responsible for the difficult part – the running of the actual bakehouse, a labour-intensive place where the system of keeping tabs on the flow of commodities was very vulnerable as grain was turned into flour and then made into loaves. This was separately documented in these papyri. We learn that 3.5 sacks of flour make 168 standard loaves, or 602 small loaves, with separate notations for weight and for losses of weight during the baking process. A sack of flour seems to be the product of about two sacks of grain, but no one is allowed to take an average ration for granted. Measurement took place at every step and the discrepancies were noted. Milling was traditionally a woman's job, and there is one brief entry illustrating this: on one day three women, representing a group of 26, collected 10.5 sacks of grain and turned it into 7.5 sacks of flour. The rate of issue of wheat would have amounted to some 50,000 sacks each year, which would have required a granary about one-quarter of the size of that at the Ramesseum, although we also have to allow for a separate and substantial amount of cereal used for brewing beer. But since the wheat was for immediate baking we must also accept the existence of a substantial dependent population, running into many hundreds, if not the low thousands. This is understandable if we understand the term 'palace' to have embraced a community, with its own offices and

accommodation, far larger than the formal buildings used personally by the royal family.

The palace was much more than just architecture and provisions. Decisions of state and matters of dynastic succession must have been far more prominent in the minds of those who lived there, and what they concluded and did provides historians with the raw material for their profession. The harim conspiracy of Rameses III's time is a case in point. The area that most consistently illustrates the political realism with which business at court was conducted is foreign affairs. The New Kingdom saw a great change in Egypt's international position. Conquest and empire moved to the forefront of real policies as well as of ideology. The result was an empire that took in much of northern Sudan and, to the north-east, Palestine and part of Syria. The reality of significant conquest boosted the portrayal of the king as mighty conqueror, something done with much vigour and lack of embarrassment on temple walls and in many other contexts (Figure 6.14). Success in battle, however, also led to deadly political gamesmanship with powerful enemies even further afield, whom Pharaoh could never hope to conquer. A study of New Kingdom foreign relations becomes the most important window open to us for observing the existence, at the highest level, of political acumen coping pragmatically with difficult real situations far removed from the cosmic tramplings of kings as depicted simultaneously in Egyptian art.

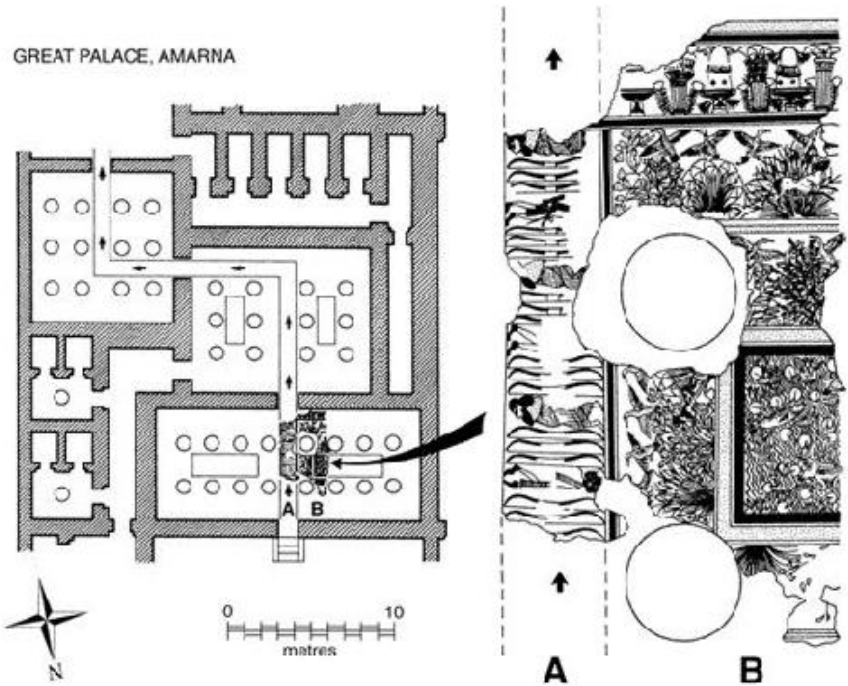


*Figure 6.14*Imperial images. *Above*. God's blessing for Pharaoh's conquests. Rameses II smites a Semitic victim, whilst god, in the form of Atum Lord of Tju (= Tjeku, a local place), offers him a sickle-shaped sword to legitimize the act. From a temple at Tell el-Retaba, eastern delta (marked on the map in Figure 1.10, p. 43). After W.M.F. Petrie, *Hyksos and Israelite Cities*, London, BSAE, 1906, Pls XXIX and XXX. *Below*. Pharaoh Akhenaten tramples his enemies, within the security of his palace. *Right*. A

section of painted pavement from the Great Palace at Amarna, depicting two themes: a rectangular pool surrounded by vegetation (B) and a central path (A) of bound foreign captives alternating with groups of three bows, symbolic of the king's enemies in general. After W.M.F. Petrie, *Tell el Amarna*, London, Methuen, 1894, Pl. II. *Left*. Outline plan of part of the Great Palace showing the context of the painted pavement, and how the painted pathway continued. As the king strode from hall to hall he crushed his enemies underfoot. After Pendlebury, *COA* III, Pl. XIIIA, and comments on p. 40. F. Weatherhead, *JEA* 78 (1992), 182, Fig. 1; Weatherhead, *Palace Paintings*, 10–28, restores the layout of the pathways a little differently. For the location of this part of the Great Palace, see Figure 8.5, no. 8 (p. 332).

The prime source is a cache of clay tablets from a government office in the centre of Akhenaten's capital, Amarna (Figure 8.5, p. 332, marks the site), written in cuneiform script employing local forms of the Akkadian language.[69] The bulk of the tablets are letters from western Asiatic courts, and copies of letters sent from the Egyptian court in return. In political terms the letters fall into two main groups which immediately delimit the real sphere of Egyptian power abroad. One is correspondence between Egypt and other states of great-power status where the mutual mode of address is 'brother'. These are the states of Babylonia, Assyria, Mitanni, Hatti and Alashiya (either Cyprus or a kingdom in southern Anatolia). The content is mainly personal, but might include a political element, as with the king of Alashiya's advice not to align with the kings of Hatti and Babylon (EA 35). With the letters went exchanges of presents, a practice taken very seriously and about which kings were most sensitive in balancing what they gave against what they received. Arranged diplomatic marriages were another delicate area.

The second group of letters concerns the city-states of Palestine and Syria, their princes and their resident Egyptian officials. They address Pharaoh as 'my lord'. Those closer to Egypt had little prospect of an improved alternative, but the Syrian princes were in a position to make choices of major importance for themselves. Their aims have been summarized as follows: preservation of their own local autonomy; extension of their own rule over neighbours; maintenance towards the Egyptians of a show of loyalty to secure men and money; and either opposition or submission to the Hittite king according to circumstances.[70] Their letters tend to have the form of a long introductory protestation of absolute loyalty couched in obsequious language:

> This is the message of a slave to his master after he had heard what the kind messenger of the king [said] to his servant upon arriving here, and [felt] the sweet fragrance that came out of the

mouth of Your Majesty towards his servant.

Thus Abimilki, Prince of Tyre (EA 147). In such cases the direct political message tends to be reserved for a brief final sentence or two, although some writers, notably Rib-addi of Byblos, could sustain loquacious pleas for support for much of their letters. A constant element is denunciation of a neighbouring prince on grounds of disloyalty to the king of Egypt. Since the accusations at times extended to the murder of one prince by another (e.g. EA 89, also 73, 75, 81, 140), these were not necessarily to be dismissed as inventions.

The obvious conclusion to be drawn from this material is that, although no trace has survived of anything like an objective comment on an international situation, behind the façade of total military supremacy Egypt's foreign relations were politically based, required careful interpretation and judgement, and involved discussion of situations in terms of human motives. For this we may assume that the Egyptians were well equipped. In the first place, they tended to write letters to their superiors in a not dissimilar exaggerated style. Secondly, the giving of judgements in Egypt (something which was not confined to a class of professional judges but was probably a basic attribute of holding a significant office), although it might well involve reference back to documentary archives, was essentially a matter of resolving conflicting testimonies and assessing human motives. People who could pronounce judgement in a convoluted case of disputed land ownership going back over several generations had the right frame of mind for reading between the lines of diplomatic letters.

The letters, however, had another and more insidious dimension. They created a mental world of their own, into which all the correspondents were drawn. For the king of Egypt, more or less at the end of the letter-writing line in geographical terms, it was a world of maybe 50 members, each one a ruler or occasionally another member of a ruler's family. The members rarely if ever met. They wrote to each other with long intervals in the correspondence, but there were enough of them to sustain at the Egyptian court (and doubtless in many courts elsewhere) a permanent office and secretariat to deal with them. As they read letters and dictated replies they must have formed in their minds shadowy images of one another which were frequently wrong in detail, but which captured the essence of the situation: that they were all players on a political stage and had a

broadly similar motivation. Although they usually wrote to gain a specific end, their letters also represented moves in a game where the stakes were measured in prestige and dignity. In this artificially constructed world of long-distance communication a king might blush or rage at thoughts of what had been said about him in a distant court that he would never see and could not punish, thoughts conjured up by the words of a letter of clay and the tales of the envoy who brought it. The Egyptian battle scenes on temple walls reduced international conflict to a level of absolute simplicity. Backed by the gods Pharaoh smote helpless and impotent foes with impunity. The letters, however, drew the same Pharaoh into a world of international vanity in which the price of acceptance as a star player was exposure to competition. Here he was no longer a god.

The multicultural court

At first sight, the consequences at home of participation in the rounds of warfare and diplomacy in the Near East were slight. New Kingdom palaces as they have survived seem to be quintessentially Egyptian, with their halls of columns shaped like papyrus stems and their paintings of marsh life beside the Nile or of Pharaoh in his chariot. If we wish to imagine them with people, the scenes of court life of the time direct us to a refined and elegant Egyptianness of style. Other kinds of evidence, however, although generally less obvious, point towards a more complex picture. They suggest that in possessions, dress, language and other aspects of culture, court life actually followed a more international style and was perhaps not quite as one might at first imagine it to have been.

In Chapter 1 we saw how, in the New Kingdom especially, Egypt became home to numerous people of foreign origin who, from the evidence at our disposal, seem easily to vanish from our gaze through the adoption of Egyptian culture. Amongst the exiles were foreign princesses accepted in marriage for reasons of diplomacy. Tuthmosis IV had married a daughter (her name not preserved) of the king of Mitanni (Artatama). Amenhetep III had done the same, twice over, marrying first Gilukhepa, daughter of Shuttarna II, and then her niece Tadukhepa, daughter of Tushratta, both successive kings of the same Mitanni. There are also records of marriages to two daughters of Babylonian kings, and to the daughter of the ruler of an important state (Arzawa) in south-east Anatolia. Akhenaten followed with

marriage to another Babylonian princess. Rameses II married two daughters of the Hittite king, and one each of the kings of Babylon and of a client state in Syria, Zulapi.[71]

For their subsequent lives in Egypt we must rely primarily upon circumstantial evidence. The marriages simultaneously brought to the Egyptian court costly dowries and attendants. A tribute list of Tuthmosis III mentions for his twenty-fourth year the 'daughter of a prince together with her ornaments of gold and lapis lazuli of her land, and the retainers belonging to her, male and female slaves, 30 of them'. When Gilukhepa arrived as Amenhetep III's latest bride she brought with her 317 ladies-in-waiting. As for the dowries, we are fortunate in possessing, on two large clay tablets, a detailed itemized list of what was sent by Tadukhepa's father to accompany his daughter when she set out some years later to be a further bride to Amenhetep III. It is a treasure-list of the kind that historical romances imagine: earrings, finger rings, ornamental dress-pins and necklaces of gold set with precious stones, bunches of grapes and pomegranates of gold, combs of silver, drinking-horns from aurochs overlaid with gold, a plaque depicting 'Deluge Monsters' in gold and silver, multi-coloured textiles, boxes of special woods also overlaid with gold and silver. With the princess came two principal ladies-in-waiting and at least 270 female and 30 male attendants, and the gifts included jewellery for them as well, a useful reminder that the court was relatively densely populated with people of whom rich attire was expected.[72]

If we try to imagine what the dowry would have looked like, it would be a collection of treasures of rich materials and of stunning craftsmanship that, had it survived to fill museum cases, would probably have been more at home in the national museums of Syria or Iraq, or perhaps Turkey. Partly because it might not have been appropriate to include such material amongst the furnishings of tombs, and partly through past successes by tomb robbers, almost nothing of this kind has actually survived from Egypt. But the implication is that somewhere in the storerooms of Egypt's several palaces there would have been wooden chests of these rich exotica, and doubtless individual pieces were to be found scattered through the living-quarters and worn by their owners on suitable occasions; worn not necessarily with the white linen that was the traditional dress of the Egyptians, but with garments and textile wraps of bright colours such as those in specified Near Eastern styles, using red and blue-purple, which were amongst Tushratta's wedding gifts.[73]

The cultural mix at court extended beyond clothing and jewellery. Some of the Amarna cuneiform clay tablets were not letters but carried literary texts, derived not from Egypt but from the Near East. One (EA 356; Figure 6.15) contained part of the myth of Adapa and the South Wind, Adapa being a Mesopotamian culture hero from the city of Eridu and son of the god Ea. In the tale, whilst on a fishing trip in the sea, he breaks the wing of the South Wind but, with his father's advice, visits heaven and is offered the chance of redemption. When read in translation the whole style and cultural associations of the story seem very un-Egyptian.[74] Details of script and language show that the writer came from the Mesopotamian heartland, from Babylonia; but, together with two other Amarna literary tablets, it is exceptional in having red dots added at intervals along the lines of writing. This appears to be a distinctively Egyptian practice that helped to give expression when reading aloud. Moreover, the language and style of writing of these literary tablets differ from those used by the scribes who wrote the cuneiform letters that form the bulk of the Amarna collection. This implies that the literary texts were not scribal practice pieces but were read aloud to an understanding audience for the sake of their cultural interest. Is this what the Babylonian princesses of Amenhetep III and Akhenaten listened to?

*Figure 6.15*A different view of the outside world: a source of myth and literature. *Top left*. Amarna tablet EA 356, verso, contains part of the myth of Adapa and the South Wind, the lines of cuneiform script pointed with red dots in Egyptian style. Height 17.5 cm. *Top right*. Amarna tablet EA 368, verso, a fragment of a vocabulary which transcribes ancient Egyptian words into the cuneiform script in the left column and gives their equivalent meaning in Akkadian in the right. Height 6.5 cm. After Izre'el, *Tablets*, Pls XXII, XL. *Below and right*. Fragments of a papyrus roll containing, in the Egyptian hieratic script, the story of the appeasement of the angry sea by the goddess Astarte. After A.H. Gardiner, 'The Astarte Papyrus.' In Glanville, *Studies Griffith*, Pl. 9, opp. p. 76.

Study of the finer points of the language and writing of these tablets has also suggested that scribes (dare we call them 'scholars'?) from other faraway centres left their mark on the Egyptian court-

school at Amarna: from the Hittite capital of Hattusas (modern Boghazköy), where Akkadian was studied by people whose native language was a form of Indo-European, and probably from Ugarit in Syria. Two more of the Amarna tablets are parts of an epic that tells of an expedition of Sargon, king of Akkad, to Anatolia, in which Hurrian influence has been detected.

The evidence adds up to the likelihood that a scribal 'school' (an international centre of learning in the making?) was run in or near the 'Records Office' in the Central City at Amarna, and that it was for the benefit not only of Egyptians but of students from the Near East as well. There are practice pieces for learning the trade of letter-writing but also aids to a more confident knowledge of cultural background (such as a list of names of Near Eastern gods, EA 374). One of the pieces of evidence is part of a vocabulary tablet (EA 368; Figure 6.15). On the left on one side is a column of Egyptian words written out in the cuneiform syllabary, which incidentally gives us a more reliable guide to how the words were pronounced than is normally to be derived from hieroglyphs. In the right-hand column cuneiform signs have been used to write the Akkadian equivalents. The last seven lines preserve the entries: 'The house, The door, The bolt, The door-posts, The chair, The bed, (Offering)-table'. These are not words that one would need often, if at all, in writing diplomatic letters. They look more like words of everyday speech. Moreover, the form of the list points to it having been for an Akkadian native speaker who was learning colloquial Egyptian. It seems to be the ancient equivalent of a page from a phrase book.

This tablet was not found anywhere near the 'Records Office'. It was found in a private house (house no. O49.23) some way from the centre of the city. Does this mean that an Akkadian speaker from somewhere in the Near East – Babylon itself perhaps? – actually stayed in this house for a while? And if so, was he there as the guest of an Egyptian family or was the house available for rent? Although the New Kingdom is generally better documented than other periods, we simply do not know enough to be able to answer such questions. It is not unique in this respect. Another of the tablets (EA 359) is a fragment of the epic of Sargon of Akkad mentioned above, which was found in house no. O47.2. A third tablet (EA 379), a fragment of a sign list which might, therefore, have been useful to someone learning Akkadian, was found in house no. N47.3. In this case the learner could have been an Egyptian.

The cosmopolitan pooling of literary knowledge and imagination

shows up, too, on the Egyptian side. The clearest example survives only as small fragments of what had once been a long papyrus, written in a clear hand shortly after the end of the Amarna Period, in the vernacular idiom of the day (Late Egyptian) though the place where it was found is not known (Figure 6.15). The setting is one familiar from other Egyptian tales: a disturbance to the essentially domestic life of the gods and goddesses, who here include the creator god Ptah and the great company of gods, the Ennead. What makes the tale distinctive is that the disturbance in their lives is caused by the Sea (*yamm*), who is described as ruler of the earth and sky, and has the power to cover the earth and the mountains unless his demands for tribute are met. An intermediary is sought, namely the goddess Astarte (of Near Eastern origin), who is given the role of 'daughter of Ptah' and is summoned by the (Egyptian) goddess Renut who sends birds to awaken her. The ending is lost.[75]

Although our predominant image of Egypt is of an oasis-like country fed by the Nile but isolated by the desert, where the Nile delta meets the Mediterranean actually represents a minimum 300 km of coastline. Although journeys to the Near East by sea were dangerous (sometimes owing to piracy), so, too, were journeys by land. Even at the times of greatest Egyptian military assertion, northern Sinai and parts of Palestine were home to Bedouin peoples who were not part of the world of treaties, trade, agricultural towns and local government to which both Egypt and much of the Near East belonged. Particularly from the New Kingdom onwards, a proportion of the Egyptian scribal class would have taken the sea route and thus have had experience of sea travel. It seems fitting that the entry of the sea into the range of tales that, for most Egyptians, probably defined their mythology also gave a prominent part to the goddess Astarte. She, along with Baal and a few other Near Eastern divinities, was adopted into the Egyptian pantheon in the New Kingdom. By this time the Egyptians had started to replace their traditional term for the sea, 'the great green', with an imported Semitic word, *yamm*, and it is as Yamm that the Sea, now personified as a god, appears in the story. That same personification was present in the mythology of the Near East. He appears, as Prince Yamm, in fragments of a mythological tale preserved on clay tablets found at the port city of Ugarit, and is vanquished after a lengthy contest with the god Baal, son of El, the head of the pantheon.[76]

Given that the Amarna tablets reveal at least a limited circulation of Near Eastern literature at the Egyptian court it is easy to understand how the story of the Astarte Papyrus could have been

composed and written down in good Egyptian by a scribe who could seamlessly weave into his tale elements from both cultural worlds. From this perspective, it seems less surprising that the kings of Mitanni should send on a temporary goodwill visit, on two separate occasions, a statue of Shaushka of Nineveh (the Hurrian version of the goddess Ishtar, of whom Astarte of Palestine was another regional form) to the court of Amenhetep III, perhaps to bless the marriages of the Mitannian princesses to the king. Once arrived in Egypt, the goddess 'dwelt there and they honoured her' until it was time to send her back.[77]

Most people reading this book will have some liking for ancient Egypt and will attempt to imagine it as it is defined by its most familiar sources. But for the king and his courtiers at this time, Egyptian traditions were all too familiar. What evidently took their fancy, in promoting a cultivated if perhaps superficial style of living, were the tastes of the wide world of western Asia (the Near East). In their daily lives, they were prepared to sacrifice (what we might see as) cultural integrity just as easily as they were prepared to ignore traditional strictures about keeping foreign peoples at bay.

Army and temple

The empire brought to Egypt an enhanced militarism. In earlier periods, civil wars had been fought and territories conquered, particularly in Nubia. A striking level of specialist military architecture for the defence of towns had been developed (Chapter 5). But all the evidence suggests that the fighting was done by militias raised for a specific campaign, sometimes stiffened by Nubian desert warriors (often Medjay people). Battlefield weaponry remained strangely crude – clubs and flint spears even in the Middle Kingdom. All this changed in the New Kingdom. Faced with the need to battle against the well-equipped armies of western Asia the Egyptians borrowed technology and tactics, and seem for the first time to have established a standing army of long-serving soldiers and officers.[78] Armies have a clear and straightforward purpose and much of what can be said about them takes the form of a catalogue of weapons, a listing of ranks and units, and a chronicle of particular fights. The army of the New Kingdom was no exception. From our point of view, a more interesting concern is this: all institutions have a place in the state, are part of the system by which power is wielded at home.

Where did the Egyptian army fit into the government of the New Kingdom?

Because of the nature of the Egyptian administration – basically an extended cluster of centres of activity potentially in rivalry with one another – it is by no means clear that members of one 'profession' felt themselves to be part of a group with a common interest and thus, potentially at least, possessed of political power. Even the staff of temples were probably no exception; the army, however, may well have been. We can call the New Kingdom army professional not merely on the grounds of general business-like appearance. It took in young recruits and put them into training camps, and campaigns and garrison duty were fairly regular. Army units were stationed within Egypt. The Horemheb Edict, for example, speaks of two corps of the army, one in the south and one in the north. Its soldiers had the chance to be in the palace to guard the king personally. The Edict also reaffirms a custom of employing as the king's bodyguard a group of soldiers from the provinces that was changed every ten days (the Egyptian 'week'), the changeover marked by the distribution of special extra rations at the Window of Appearance.[79] For veterans there is evidence from the Eighteenth Dynasty as well as from the late Twentieth that they were settled with grants of land. By the very nature of its life the New Kingdom army was a body of men, an institution, with its own sense of identity arising from its separateness from normal life. This separateness was heightened as the New Kingdom progressed by the increasing practice of recruiting or impressing into service foreigners, from Libya and from the countries of the eastern Mediterranean. They, too, enjoyed grants of land in Egypt (Figure 1.5, p. 33). Many of them would also have been in a position of close proximity to the king, sufficiently so to observe what he was like as a real person. Egypt was giving itself its own army of occupation, and with it another foretaste of the future.

In considering the role of the army – institutionalized armed force – we have to ask ourselves a very basic question: who really were the kings of Egypt? Where did they come from? The Egyptians themselves put up a great and very effective screen around this question. The elaborate array of ceremony, myth, insignia and sycophantic language that surrounded kings from coronation to death and beyond represented in total an overwhelming intellectual and behavioural assault on society to the effect that the reigning king's position was unquestionable and unassailable. Granted that within the confines of the court the question of which royal male would succeed next offered

opportunities for scheming, for long periods the royal succession remained within a single family, a dynasty. Even when dynasties changed the newcomer might seek legitimacy by marrying a woman from the ousted royal house. But dynasties did change. The origins of the newcomers, except when foreign, are almost invariably hard for us to trace simply from a general lack of evidence. Sometimes they seem to have been already prominent at court, sometimes they arose from the provinces. What we have to accept is that they saw the office of king for what it really was: a goal for an ambitious man to grasp at a time when the great screen of divine kingship was temporarily lowered and made it seem practicable. Usurpers and founders of new lines were not summoned from a state of innocence by priests or by mysterious voices or supernatural signs. They responded to ambition. Before the New Kingdom there appears not to have been a professional standing army. But if militarism was less a factor in previous periods, so also was people's experience of it. It simply means that intimidation could be achieved by less. The Eleventh Dynasty, and the historical prominence of Thebes, arose from victory in a civil war. The background to the change from the Eleventh to the Twelfth is not very clear, but the successful usurper, Amenemhat I, himself fell victim to assassination. And if we go back to the very beginning of Egyptian history the sources show that kingship arose from a period of internal warfare, which reappeared at the end of the Second Dynasty. The screen of divine kingship maintained kings and dynasties in power for long periods of political stability, but ultimately kingship was the outcome of force.

The New Kingdom developed from the defeat of foreign armies. The portrayal of kingship responded to the new militarism in society with a greatly reinforced image of military leadership. Some kings developed a taste for the battlefield and for annual campaigns. But whereas in the past armed force could be mustered in the service of ambition, now the armed force was there all the time, dispersed through the provinces both at home and abroad. It became the source of ambition itself. This came to maturity at the end of the Eighteenth Dynasty. In the Amarna Period, so we have to imagine, the changes brought about by Akhenaten alienated many people (amongst them those with an interest in traditional knowledge which centred on temples) whose view of the world gave prominence to the god Amun, whose very existence Akhenaten tried to destroy. But in the aftermath the group whose representative became king – in the person of the general, Horemheb – was the army. In succession to him the throne

passed to a military family from the eastern delta who founded the Ramesside line of kings (the Nineteenth Dynasty).

Before they became kings, Horemheb and Rameses I carried a title that seems to mean 'heir apparent'.[80] By whom was it bestowed? It implies prior agreement as to how the succession would proceed and, furthermore, that amongst the ranks of senior figures who are known to us only by names and titles were some who could form an authoritative council that could make such a decision. Were they mainly civilians (senior members of temple staff, treasurers and so on) who recognized where real power lay and whose job it was to bestow legitimacy on it, or was there something like a military council? One of the specified duties of the vizier was to receive an 'army council' prior to giving it instructions.[81] Was this the body, presided over by the vizier, that chose Horemheb and then Rameses I? Our inability to penetrate the workings of the state severely limits what we can write about the political history of ancient Egypt.

Yet militarism was evidently not characteristic of educated Egyptian society as a whole. Outside the stylized portrayals of kingly victories, the celebration of valorous deeds on the battlefield is conspicuous by its absence both in literature and in the art of private tombs. These provided space for a man to record his successes, but refined taste none the less excluded combat and bloodshed. Literature and art left warriors voiceless. In a fragmentary tale about the capture of the Palestinian city of Joppa by 'the strong arm of Pharaoh', the capture is actually done by a stratagem that enabled Egyptian soldiers to be smuggled inside.[82] As far as we can tell, no Egyptian equivalent to the *Iliad* was written down to stir the blood of listeners at home. Moreover, the army and the empire in the end depended on the civil administration, from whose ranks also came politically powerful individuals. At school, through the texts that served as models for copying, young scribes were taught a disdain for all professions other than their own. This extended to military careers, and scorn was poured on the soldier and on the chariot officer and on service abroad. These texts evince no positive side other than selfishness – being a scribe 'saves you from toil, it protects you from all manner of labour'[83] – but simply in preferring power through orderly administration to glory through action and adventure people who had accepted this ethos must have been a source of counter-arguments to those of the military. The creation of colonies in Nubia modelled on Egyptian temple-towns of the New Kingdom extended Egyptian-style administration over one complete sector of the empire, leaving

western Asia to provide the main scope for military shows, though even here, as the Amarna letters imply, identifying the enemy was itself a task for home-based officials.

We can see the shadowy outline of two opposed interest groups in the New Kingdom: army and civil scribes, the latter with well-placed representatives amongst the courtiers. The harim conspiracy in the time of Rameses III involved many of these, and the leaders had sought (though with limited success) the support of the army (though not of temple personnel). This conspiracy was 'political' in the narrow sense that those involved plotted and acted in accord with a pragmatic evaluation of risks and rewards.

Where does this leave the temples? At what might be termed the entry level, one model text reveals that young men could be conscripted into the staff of a temple by the vizier, whose order could then be countermanded so that they were sent elsewhere to be soldiers, revealing the absence of a sense of 'calling' in the former case and how, in the eyes of other officials, temple personnel were just another department of labour.[84] In the case of the most important office, that of High Priest of Amun at Karnak, we can follow its fortunes through most of the New Kingdom. For the Eighteenth Dynasty and the Nineteenth into the reign of Rameses II each high priest was a royal appointment drawn from the ranks of officialdom (two, Ptahmes and Paser, had been viziers) or from people with a background of temple service, though not necessarily at Karnak or even Thebes. The later Nineteenth and the Twentieth Dynasties were, however, largely spanned by two families (with a marriage connection) who managed to monopolize the office and many lesser ones in the Amun cult at Karnak, forming veritable dynasties of priests. Their power base, however, was civilian: the dignity of high office, the family connections, the patronage at their disposal. In the last resort they themselves were only tolerated. They fail the ultimate test: families of priests from civil backgrounds (the key point) did not provide future kings. The break between the two families coincided with civil unrest connected with the dynastic dispute that led to the coming of the Twentieth Dynasty (at the centre of which was the Chancellor Bay, probably an Asiatic at court who appears in a cuneiform letter found at Ugarit as the 'Chief of the Bodyguards of the Great King of the Land of Egypt').[85] For a time in the early Twentieth Dynasty the office of high priest was held by one Bakenkhonsu, son of a man Amenemope, who had been in charge of a militia which the estate of Amun at Thebes by now maintained.[86] But the full extent of

the dependence of civilian power on the military came only at the end. The penultimate high priest of the second family, Amenhetep, was actually ejected from his office for eight or nine months during a veritable civil war in Upper Egypt in which the viceroy of Kush at the head of a Nubian army was involved. This man established himself at Thebes and, for a short time, put himself in charge of the grain deliveries to the Estate of Amun (an act which seems to have stabilized previously erratic grain prices). When the dynasty ended the office of high priest was taken over by a military commander, Herihor, who is likely to have been of Libyan origin. The ensuing three centuries was a time of private armies. The Thebaid became a semi-autonomous province governed by the high priest of Amun who was both commander of an army and frequently a prince of the reigning house in the north of Egypt. Here we see the same fusion of authority that comes from serving gods and wielding power over others as was embodied in kingship.[87]

It was a triumph not so much of either army or priesthood but of political realism. Herein lies an important lesson. Awe of the gods was not a basis of power in itself. Its images were an illusion unless they articulated the political determination of people who, either by birthright or ambition, felt the urge to rule. They would not have put it so directly themselves. For one thing, there was no ready vocabulary of politics and realism. But if they accepted the language of deference they also bent the images in their direction and projected themselves into their centre. A powerful civilian priesthood was tolerated by the real men of power only so long as it did not get in their way.

The information society and the illusions of pageantry

Much was going on in the country (even if the population was a relatively modest 3,000,000) and in the occupied territory of Nubia and the vassal states of Palestine. The Egyptian interest in writing allowed the possibility for those at court to follow what was happening through the collation of documents. Individual examples of documentation that have survived illustrate a culture of committing a great deal of information to writing. We have already encountered examples of daily events (the Semna Despatches, pp. 27, 236–7; a letter about temporary Bedouin immigration, p. 27), personal details

of individuals (a letter giving the background to a missing slave, p. 34; the late Middle Kingdom prison register, pp. 182–3), reported speech used as evidence in trials (see Chapter 7), as well as lists of people conscripted for duties and records of income and expenditure within a host of institutions. Amongst the duties of the vizier was to maintain a regular daily routine of consultation with his officials over the state of the country and its resources and, by means of messengers, to keep in close contact with the leading officials of the provinces. From this information, he gave the king a daily morning briefing.[88] If the system was working well the king should have had a good idea, not only of how his building schemes were progressing, but also of the origin of any threats. If he had read and taken to heart the advice put into the mouth of King Amenemhat I (who had been assassinated) at the beginning of the Twelfth Dynasty, he would have known to be particularly watchful over those who were closest to him.[89]

I began the chapter by saying that one can argue that early societies actually needed the symbols and ceremonies of a political power merged with transcendental thinking centred on gods as a means of maintaining political cohesion. This is the argument of functional necessity. In the modern world, however, this pattern of behaviour as it survives does not fully coincide with the exercise of power. Although my own country, Britain, retains a monarchy that is the head of the state religion, pageantry and ceremony are not fully a symbolic articulation of political power. Much of this resides with people around whom pomp is subdued, whilst at the same time the glamour and the extravagant formalized behaviour, including the crowd adulation at staged 'appearances' (music festivals and sporting events), has spread, perhaps largely transferred itself, to celebrities who are outside the political process. Circus and power overlap but each has an independent existence. Things seem to have changed a great deal since antiquity. But have they really?

The audience at which the pomp of Pharaohs was directed commenced with the court, spread to lesser officials, and probably included by the New Kingdom at least token groups of the people at large. But the notion of collective power was hardly born. The audience was for the most part politically neutral. People complained of unjustified tax demands and demonstrated when rations failed to arrive, but they did not form political parties or revolutionary mobs. The pageantry was not buying off a real threat. Those who most represented a threat to the king were individuals closest to him, on the 'inside' of the pomp, who probably helped to organize it and were

thus least impressed by it.

We are right to look for essential communications on ideas of rule within court pageantry, couched in the understood terms of the day, for the terms themselves may have had little existence independent of the celebration itself and the preparations for it. Could we claim, for example, that the *Sed*-festival existed independently of its celebration (or anticipated celebration)? The means of communication was itself ideology. Pageantry and ceremonial were a reciprocal therapy, an 'in-touch' form of expression which all concerned found satisfying to indulge in, including the theoreticians – presumably based in temples – who devised the meaning, and for whom, without the performance, there would have been no meaning. Not only was the audience embraced by it, so also were the key performers. Modern society, in making pageantry and ceremonial more democratic and offering it as well to celebrities of sport and entertainment, usefully reveals that pomp and adulation serve a collective social need that is independent of political power. In the ancient world the merging of roles tends to obscure this, but it must still have been true. Who ruled, who rose in favour and who fell, what wars were fought and taxes raised, what new edicts were issued: the exercise of real power, behind the screens, was in fact largely irrelevant to the pomp and the ceremonial.

Notes

1 K.A. Kitchen, *JEA* 60 (1974), 168–74; E. Frood, *Biographical Texts from Ramessid Egypt*, Atlanta, GA, Society of Biblical Literature, 2007, 336–9; Kitchen, *Ramesside Inscriptions* III, 348–53; Kitchen, *Ramesside Inscriptions (Trans)* III, 252–4.

2 G. Legrain, *BIFAO* 13 (1917), 1–76 is still a valuable documentary source on the transport of sacred boat shrines in the New Kingdom and later.

3 B.J. Kemp, 'Fortified towns in Nubia.' In Ucko et al., *Man, Settlement*, 651–6.

4 J. Jacquet and H. Wall-Gordon, *MDAIK* 16 (1958), 161–75; R. Anthes, *Mit Rahineh 1956*, Philadelphia, PA, The University Museum, 1965, 72–5, Pls 24–5.

5 See note 31. Another example, at the gate of the temple of Soleb in Nubia, is documented in *Kush* 9 (1961), 186; Schiff Giorgini et al., *Soleb* V, Pl. 312.

6 B.J. Kemp, N. Moeller, K. Spence and A. Gascoigne, *CAJ* 14 (October 2004), 259–88, pp. 271–6; Kemp, *Anatomy*^{2}, 351–5, Fig. 122.

7 Esssentially the Amarna Letters: Moran, *Amarna Letters*. The treaty between Rameses II and the Hittite King Hattusili III uses the gods as guarantors (a different set for each kingdom), but is otherwise a pragmatic document in which both parties are clearly of equal standing: K.A. Kitchen and P.J.N. Lawrence, *Treaty, Law and Covenant in the Ancient Near East*, Wiesbaden, Harrassowitz, 2012, Vol. 1, 573–94; Vol. 2, 57–60.

8 For example the temple of Khnum at Elephantine, which owned lands somewhere in the north of Egypt; and the temple of Seti I at Abydos, which owned a range of productive resources in Nubia, as the Nauri Decree reveals.

For the former, see Peden, *Ramesses IV*, 69–72, 109–16 (Turin Indictment Papyrus); for the latter, see Davies, *Historical Inscriptions*, 277–308; Kitchen, *Ramesside Inscriptions* I, 45–58; Kitchen, *Ramesside Inscriptions (Trans)* I, 38–50.

9 K. Baer, *JARCE* 1 (1962), 25–45 provides a good introductory discussion of sources and interpretations relevant to landholding in ancient Egypt. Fundamental for the economy is Muhs, *Economy*; and Warburton, *State and Economy*. Pages 165–9 deal with the Wilbour Papyrus, the main source for landholdings.

10 Gardiner and Faulkner, *Wilbour*; O'Connor, 'Geography of settlement', 681–5; Adams, 'Textual window'; Muhs, *Economy*, 106–7, 118–19; J.P. Emanuel, *JAEI* 5 (2013), 14–27.

11 A.H. Gardiner, *JEA* 27 (1941), 37–56; J.J. Janssen, *Grain Transport in the Ramesside Period. Papyrus Baldwin (BM EA 10061) and Papyrus Amiens*, London, BM, 2004.

12 *Urk*, IV, 1019–21; discussed in Haring, *Divine Households*, 145–7; Kruchten, *Horemheb*, 92–3.

13 Schott, *Kanais*, 143–59; Lichtheim, *Literature* II, 52–7; Davies, *Historical Inscriptions*, 205–20; Kitchen, *Ramesside Inscriptions* I, 65–70; Kitchen, *Ramesside Inscriptions (Trans)* I, 56–60; Eyre, 'Work in the New Kingdom', 182.

14 W. Helck, *JARCE* 6 (1967), 135–51; Wente, *Letters*, 37–9; Kitchen, *Ramesside Inscriptions* VI, 517–22; Kitchen, *Ramesside Inscriptions (Trans)* VI, 384–7. The galena mines have been located, and a small and very crudely built shrine excavated (Figure 3.2, p. 114): G. Castel, J.-F. Gout and G. Soukiassian, *ASAE* 70 (1984–5), 99–105; G. Castel and G. Soukiassian, *BIFAO* 85 (1985), 285–93; Régen and Soukiassian, *Gebel el-Zeit*, 1–7, 78.

15 This version of the problem of cultural translation has received much attention. Haring *Divine Households*, 396, for example, interprets the evidence to conclude that New Kingdom temples ran on a more independent footing. The matter is discussed in Papazian, *Domain*, 33–5; Warburton, *State and Economy*, 168–9; J.J. Janssen, 'The role of the temple in the Egyptian economy during the New Kingdom.' In E. Lipiński, ed., *State and Temple Economy in the Ancient Near East* II, Leuven, Department Orientalistiek, 1979, 505–15.

16 Janssen, *Commodity Prices*, 455–9; Černy, *Community*; D. Valbelle, '*Les ouvriers de la tomb': Deir-el-Médineh à l'époque Ramesside*, Cairo, IFAO, 1985; Häggman, *Deir el-Medina*; M. Bierbrier, *The Tomb-builders of the Pharaohs*, London, BM, 1982; Muhs, *Economy*, 119–23.

17 Häggman, *Deir el-Medina*, 135–46.

18 A.H. Gardiner, *JEA* 27 (1941), 22–37 and especially 23.

19 McDowell, *Village Life*, 231–8; W.F. Edgerton, *JNES* 10 (1951), 144; Vernus, *Affairs*, 50–69; S. Häggman, *Deir el-Medina*, 87–9, 160–84.

20 Peet, *Tomb-robberies*, 12, n. 1; Janssen, *Village Varia*, 11; Häggman, *Deir el-Medina*, 121–2.

21 Nelson and Hölscher, *Work*, 46–51. A good illustration of how the 'reversion of offerings' worked and temple wealth circulated is provided by texts connected with a cult of Amenhetep III at Memphis, see R.G. Morkot, *JNES* 49 (1990), 323–37. It appears amidst the ration disputes at Deir el-Medina, Vernus, *Affairs*, 63–4.

22 J.J. Janssen, *Late Ramesside Letters and Communications*, London, BM, 1991, 44–6 illustrates a case where lands from the endowment for the cult of Amenhetep III and Queen Tiy, although they had kept their identity to the end of the New Kingdom, had somewhere along the way been added to the estates of the temple of Mut, and one portion was in the process of being transferred again to

an estate of the God's Wife of Amun. In general, Muhs, *Economy*, 109–11.

23 Breasted, *Ancient Records* III, 113, para. 274; Kitchen, *Ramesside Inscriptions* I, 332.15–333.2; Kitchen, *Ramesside Inscriptions (Trans)* I, 162–74 (p. 172 for the ship and its 'traders').

24 Janssen, *Ship's Logs*, esp. 101–2; see also Chapter 7 below.

25 Lichtheim, *Literature* I, 215–22.

26 H. Brunner, *Die Geburt des Gottkönigs*, Wiesbaden, Harrassowitz, 1964. The most easily accessible set of scenes is that of Hatshepsut at Deir el-Bahari, E. Naville, *The Temple of Deir el Bahari* II, London, EEF, [1896], Pls 47–55. The Amenhetep III texts are translated in Murnane, *Texts*, Atlanta, 1995, 22–7.

27 Hieroglyphic transcription: *Urk*. IV, 1713–21 (573).

28 E. Naville, *The Temple of Deir el Bahari* III, London, EEF, [1898], Pl. LXI.

29 P. Leiden I.350. A.H. Gardiner, *ZÄS* 42 (1905), 12–42, esp. 20–2. Evidence that the Middle Kingdom temple of Amun had been built on a natural rise in the floodplain, thus a 'mound', is presented by Charloux and Mensam, *Karnak*, 43–71; and by A. Graham, 'Islands in the Nile. A geoarchaeological approach to settlement location in the Egyptian Nile Valley and the case of Karnak.' In Bietak et al., *Cities*, 125–43, esp. 138, Fig. 14.

30 Charloux and Mensam, *Karnak*; L. Gabolde, 'Les temples primitifs d'Amon-Rê à Karnak, leur emplacement et leurs vestiges; une hypothèse.' In H. Guksch and D. Polz, eds, *Stationen: Beiträge zur Kulturgeschichte Ägyptens, Rainer Stadelmann gewidmet*, Mainz, von Zabern, 1998, 181–96; J.-F. Carlotti, E. Czerny and L. Gabolde, *CdK* 13 (2010), 111–93.

31 C.F. Nims, 'The Eastern Temple at Karnak.' In [G. Haeny] ed., *Aufsätze zum 70. Geburtstag von Herbert Ricke*, Wiesbaden, Steiner, 1971, 107–11; L. Habachi, *Features of the Deification of Ramesses II*, Glückstadt, Augustin, 1969, 20; Blyth, *Karnak*, 88–9, 102–3, 160. Note 5 for this chapter cites a parallel location at the temple of Soleb in Nubia.

32 *Urk*. IV, 1550.18.

33 The various parts of Karnak are described in Blyth, *Karnak*; P. Barguet, *Le temple d'Amon-Re à Karnak: essai d'exégèse*, Cairo, IFAO, 1962.

34 M. Gitton, *BIFAO* 74 (1974), 63–73; C.C. Van Siclen III, *BIFAO*, 86 (1986), 353–9D, on a likely early Eighteenth Dynasty palace towards the northern end of the Karnak complex; D.B. Redford, *JARCE* 10 (1973), 87–90; Smith and Redford, *Project* I, Ch. 9; Blyth, *Karnak*, 62–6.

35 P. Lacau and H. Chevrier, *Une chapelle d'Hatshepsout à Karnak* I, Cairo, IFAO, 1977, 92–153; J. Yoyotte, *Kêmi* 18 (1968), 85–91; Gitton, *BIFAO* 74 (1974), 63–73. One Deir el-Medina text is fairly explicit in identifying the voice of the god as that of a scribe reading aloud from one of two prepared texts which the god's statue had somehow chosen, McDowell, *Jurisdiction*, 110.

36 *Urk*. IV, 157–62.

37 *Urk*. IV, 837.3; see G. Björkman, *Kings at Karnak: a Study of the Treatment of the Monuments of Royal Predecessors in the Early New Kingdom*, Uppsala, Uppsala University, 1971, 86–7.

38 F. Laroche-Traunecker, *CdK* 7 (1982), 313–38, esp. p. 315.

39 A.H. Gardiner, *JEA* 38 (1952), 20–3; B. Cumming, *Egyptian Historical Records of the Later Eighteenth Dynasty* I, Warminster, A&P, 1982, 12.

40 Nelson and Hölscher, *Work*, 24–5.

41 W. Wolf, *Das schöne Fest von Opet*; *die Festzugsdarstellung im grossen Säulengange des Tempels von Luksor*, Leipzig, Hinrichs, 1931; The Epigraphic Survey, *Reliefs and Inscriptions at Luxor Temple* 1. *The Festival Procession of Opet in the Colonnade Hall*, Chicago, IL, UCP, 1994; Wilkinson, *Temples*, 95–8.

42 L. Bell, *JNES* 44 (1985), 251–94; L. Bell, 'The New Kingdom "divine" temple: the example of Luxor.' In Shafer, *Temples*, 127–84.
43 L. Bell, *JNES* 44 (1985), 254.
44 Murnane, *Texts*, 230–4; R. Hari, *Horemheb et la reine Moutnedjemet ou la fin d'une dynastie*, Geneva, La Sirène, 1964, 208–16.
45 H.H. Nelson, *JNES* 1 (1942), 127–55 documents these aspects in some detail.
46 G. Foucart, *BIFAO* 24 (1924), 1–209; S. Schott, *Das schöne Fest vom Wustentale*; *Festbräuche einer Totenstadt*, Wiesbaden, Steiner, 1953; K.A. Kitchen, *Pharaoh Triumphant: the Life and Times of Ramesses II, King of Egypt*, Warminster, A&P, 1982, 169; Wilkinson, *Temples*, 95–6, 178–9.
47 Murnane, *Guide*, 76–7; *Lexikon* III, 1256–8; Haring, *Divine Households*, 280, n. 3.
48 R. Stadelmann, *MDAIK* 34 (1978), 171–80.
49 The second palace at Medinet Habu, built over the foundations of the first, was probably built in the late Twentieth/early Twenty-first Dynasty to act as the residence for whoever was in charge of the temple and the community which surrounded it; see below, p. 363, and Figure 8.17, and B. Kemp, *CAJ* 14 (2004), 272–5, 284–5, n. 1; Kemp, *Anatomy*^{2}, 351–5, Fig. 122.
50 Murnane, *Guide*, 70.
51 Kruchten, *Horemheb*, 162–77, 199–200; J.-M. Kruchten, 'Rétribution de l'armée d'après le décret d'Horemheb.' In *L'égyptologie en 1979: axes prioritaires de recherches* II, Paris, Centre national de la Recherche scientifique, 1982, 144–8; Murnane, *Texts*, 239–40. At the end of the Twentieth Dynasty food was distributed in the 'great court' of Rameses III's temple at Medinet Habu; see Haring, *Divine Households*, 279.
52 Stevenson Smith, *Art and Architecture*, Ch. 15; W.C. Hayes, *JNES* 10 (1951), 35–56, 82–111, 156–83, 231–42; B.J. Kemp and D.B. O'Connor, *International Journal of Nautical Archaeology* 3 (1974), 101–36; Waseda University, Architectural Research Mission for the Study of Ancient Egyptian Architecture, *Studies on the Palace of Malqata. Investigations at the Palace of Malqata 1985–1988*, Tokyo, Chuo Koron Bijutsu, 1993. It has been suggested that earthworks comparable to those around the Birket Habu but on the east bank of the Nile represent the remains of another great artificial lake of the same period, e.g. Darnell and Manassa, *Tutankhamun's Armies*, 22, and n. 53. Although the purpose might have been similar, it does not follow that it was the work of Amenhetep III.
53 Epigraphic Survey, *Kheruef*, Pl. 28, p. 43. It is interesting to note that the earliest depiction of a *Sed*-festival element – the king seated on a high throne beneath a tent – occurs on one of the boats in the Hierakonpolis Painted Tomb, see Figure 2.8, p. 77. However, we cannot be sure that a *Sed*-festival is meant. In depictions of the Early Dynastic Period and at the Step Pyramid boat imagery is absent.
54 Epigraphic Survey, *Kheruef*, Pls 56, 57, pp. 59–61.
55 The most important comparative source would have been the king's mortuary temple, of which little now survives. The *Sed*-festival fragments are published in G. Haeny, *Untersuchungen im Totentempel Amenophis' III*, Wiesbaden, Steiner, 1981, Taf. 40–2. The Soleb temple scenes of Amenhetep III's *Sed*-festival also contain no reflection of the Kheruef scenes, although they, too, are fragmentary. They did give extensive space to showing the king processing around a walled enclosure pierced by many named gateways and knocking on each door with a mace: Schiff Giorgini et al., *Soleb* V, Pls 39–60.
56 Epigraphic Survey, *Kheruef*, Pls 42, 43, pp. 49–51.
57 For the written sources in the New Kingdom, F. Hagen, 'On some movements of the royal court in New Kingdom Egypt.' In van Dijk, *Mouthful of Dust*, 155–81.

58Murnane, *Texts*, 83.
59Caminos, *Miscellanies*, 198–201.
60Gardiner and Faulkner, *Wilbour*, II, 18; Helck, *Materialien*, II, 235 = 1017.
61Lehner and Hawass, *Giza*, 468–84.
62M. Bietak and I. Forstner-Müller, 'The topography of New Kingdom Avaris and Per-Ramesses.' In Collier and Snape, *Ramesside Studies*, 23–50: 40–2; W.C. Hayes, *Glazed Tiles from a Palace of Ramesses II at Ḳantīr*, New York, MMA, 1937.
63A convenient plan is A. Badawy, *A History of Egyptian Architecture: the Empire (the New Kingdom)*, Berkeley and Los Angeles, CA, UCP, 1968, 53, fig. 29; see also D.G. Jeffreys, *The Survey of Memphis* I, London, EES, 1985, 15, 19–20, fig. 63.
64Stevenson Smith, *Art and Architecture*, 159–61; P. Lacovara, *NARCE* 113 (Winter 1980), 3–11; 129 (Spring 1985), 17–29; P. Lacovara, 'The Hearst Excavations at Deir el-Ballas: the Eighteenth Dynasty town.' In W.K. Simpson and W.M. Davis, eds, *Studies in Ancient Egypt, the Aegean and the Sudan: Essays in Honor of Dows Dunham*, Boston, MA, MFA, 1981, 120–4; P. Lacovara, *Deir el-Ballas: Preliminary Report on the Deir el-Ballas Expedition, 1980–1986*, Winona Lake, IN, Eisenbrauns, 1990; Lacovara, *Royal City*, 6–16, 94–112.

65B.J. Kemp, *ZÄS* 105 (1978), 122–33; I. Shaw, 'Seeking the Ramesside Royal Harem: new fieldwork at Medinet el-Gurob.' In Collier and Snape, *Ramesside Studies*, 453–63.
66D. Polz, *MDAIK* 42 (1986), 145–66; S. Ikram and A. Dodson, *The Mummy in Ancient Egypt: Equipping the Dead for Eternity*, London, T&H, 1998, 216, 225.
67A. de Buck, *JEA* 23 (1937), 152–64; also Pritchard, *Texts*, 214–6; Peden, *Historical Inscriptions*, 195–210; Kitchen, *Ramesside Inscriptions* V, 350–60; Kitchen, *Ramesside Inscriptions (Trans)* V, 297–302; Vernus, *Affairs*, 108–20.
68W. Spiegelberg, *Rechnungen aus der Zeit Setis I.*, Strassburg, Trübner, 1896; Helck, *Materialien* IV, 633–41; Kitchen, *Ramesside Inscriptions* I, 243–81; Kitchen, *Ramesside Inscriptions (Trans)* I, 207–30; A. Spalinger, *BIFAO* 86 (1986), 307–52.
69Moran, *Amarna Letters* provides a complete translation. Each letter is given a number with the prefix EA. For discussions of the mentality of those who wrote them and the extent to which they grasped a broader political dimension, see R. Cohen and R. Westbrook, eds, *Amarna Diplomacy: the Beginnings of International Relations*, Baltimore, MD, and London, Johns Hopkins University Press, 2000. The rationale of ancient imperialism is not so easy to reconstruct, as is evident from the exchange of views by B. Kemp and S.T. Smith in *CAJ* 7 (1997), 123–37, 301–7.
70K.A. Kitchen, *Suppiluliuma and the Amarna Pharaohs*, Liverpool, Liverpool University Press, 1962, 14.
71A.R. Schulman, *JNES* 38 (1979), 177–93.
72Moran, *Amarna Letters*, 51–23 (EA 22), 72–84 (EA 25).
73Moran, *Amarna Letters*, EA 22. The coloured and decorated tunics from Tutankhamun's tomb are perhaps examples, which could have been made abroad or made in Egypt by weavers working to patterns which had become international. See G.M. Crowfoot and N. de G. Davies, *JEA* 27 (1941), 113–30; G.M. Vogelsang-Eastwood, *Pharaonic Egyptian Clothing*, Leiden, New York and Cologne, Brill, 1993, Pl. 40; G.M. Vogelsang-Eastwood, *Tutankhamun's Wardrobe: Garments from the Tomb of Tutankhamun*, Rotterdam, Barjesteh van Waalwijk van Doorn, 1999, 81, fig. 5.1.
74This less familiar aspect of the Amarna 'letters' is covered in depth by Izreʾel, *Tablets*; S. Izreʾel, *Adapa and the South Wind: Language Has the Power of Life and*

Death, Winona Lake, IN, Eisenbrauns, 2001.

75 A.H. Gardiner, 'The Astarte Papyrus.' In Glanville, *Studies Griffith*, 74–85; Pritchard, *Texts*, 17–18; P. Collombert and L. Coulon, *BIFAO* 100 (2000), 193–229. For a probable early Ramesside magico-medical text which utilizes Ugaritic motifs: H.-W. Fischer-Elfert, '*Sāmānu* on the Nile: the transfer of a Near Eastern demon and magico-medical concept into New Kingdom Egypt.' In Collier and Snape, *Ramesside Studies*, 189–98.

76 Pritchard, *Texts*, 129–31.

77 EA 23: Moran, *Amarna Letters*, 61–2.

78 I. Shaw, *Egyptian Warfare and Weapons*, Princes Risborough, Shire Publications, 1991; I. Shaw, 'Egyptians, Hyksos and military hardware: causes, effects or catalysts?' In A.J. Shortland, ed., *The Social Context of Technological Change: Egypt and the Near East, 1650–1550 bc*, Oxford, Oxbow, 2001, 59–71; A.R. Schulman, *Military Rank, Title and Organization in the Egyptian New Kingdom*, Berlin, Hessling, 1964; Y. Yadin, *The Art of Warfare in Biblical Lands in the Light of Archaeological Discovery*, London, W&N, 1963.

79 Kruchten, *Horemheb*, 82–95, 164–77.

80 A.R. Schulman, *JARCE* 4 (1965), 55–68.

81 Van den Boorn, *Duties*, 218–28; James, *Pharaoh's People*, 66.

82 Pritchard, *Texts*, 22–3.

83 Caminos, *Miscellanies*, 51, 317.

84 P. Bologna 1094.5.2–5.5 = Caminos, *Miscellanies*, 16–17. Cf. also P. Bologna 1086.22–3 = Wente, *Letters*, 125.

85 M. Bierbrier, 'Bye-bye Bay.' In Collier and Snape, *Ramesside Studies*, 19–21; A. Dodson, 'Fade to grey: The Chancellor Bay, *Éminence Grise* of the Late Nineteenth Dynasty.' In ibid., 145–58.

86 *Lexikon* I, 688; II, 1244.

87 The end of the Twentieth Dynasty is still much debated: K. Jansen-Winkeln, *ZÄS* 119 (1992), 22–37; D. Polz, *SAK* 25 (1998), 257–93; A. Thijs, *SAK* 31 (2003), 289–306; A. Thijs, *ZÄS* 132 (2005), 73–91; S.R.W. Gregory, *Herihor in Art and Iconography: Kingship and the Gods in the Ritual Landscape of Late New Kingdom Thebes*, London, Golden House, 2014; J. Palmer, *Birmingham Egyptology Journal* 2 (2014), 1–22; S. Häggman, *Deir el-Medina*, 200 ff.

88 Van den Boorn, *Duties*, 55.

89 Lichtheim, *Literature* I, 136–7; Parkinson, *Voices*, 49–51; Simpson, *Literature*, 167–9. A fragment of the text was found copied on to a potsherd in a house at Amarna, see Chapter 8, note 64.

7

The birth of economic man

It is possible to compile a 'Who's Who' of ancient Egypt for certain periods. The New Kingdom is one of them. One fact to emerge is that no one who was prominent and successful claimed to be so on a basis independent of the state. Everyone was an 'official'. You could rise from a humble background to be the most powerful man in the land next to the king, but only because the king recognized your merits, one of them being loyalty. We will find no self-made men of trade or of manufacture, no merchants or moneylenders, no one who boasted of 'profit'. At least, that is what the inscriptions, the ideal autobiographies carved in tombs, tell us. As a consequence, on the basis of the formal written and pictorial evidence, we can conclude that the effective part of Egyptian society consisted only of institutions.

As always, however, we must be on our guard against confusing myth with structure. It is equally true to say that ancient Egypt possessed no politicians, in the sense that that word is used now, that is, to refer to people who make it their business to articulate and to struggle for the interests of one particular group. But the Egyptians were not politically innocent. Within the framework of the loyal hierarchy of officialdom ambitious individuals pushed themselves forwards and plotted to undermine those who stood in their way. The politics of self-interest most definitely existed, contained within the single system of administration. It was a later world, more given to abstract thought and less internally cohesive, that provided the political schemer with the 'cause' and the special-interest group, and thus the opportunity to reveal politics as an independent subject and calling.

Economics offers a roughly similar picture. No one thought 'economics' or pursued it as an independent goal, yet should we conclude that the Egyptians were economically naive? The matter is clouded by the existence of a body of broad theory which encompasses both ancient and 'primitive' societies, and which tends to claim just this economic innocence. Characteristic of this approach is a

careful and self-conscious distancing of the historian from the modern economic world. It urges us not to take for granted, for example, the basic experience of valuing our transactions in terms of profit and loss. The reason given is that the economic systems of the ancient past were significantly different from those of the present. We can construct models of how they worked only from the ancient sources themselves, from a judicious use of ethnographic literature, and from certain points of reference that seem to be generally valid for economies in early complex societies. We must be alert, according to this view, to the dangers of implanting into the past the motivations and the means of the economies that we ourselves are familiar with. This is a valuable, indeed essential discipline, yet if left here it runs the risk of unnecessarily isolating the past and impoverishing the discussion. In particular, it depicts ancient systems as static entities devoid of mechanisms of adjustment to changing circumstances.[1]

Furthermore, if the contrast between present and past is so crucial, it is important to have an informed basis of just what does constitute 'the present'. Herein lies another source of weakness. In discussions of this kind the economic systems of the present are made synonymous with 'market economies', the product of mercantilist thinking and practice of recent centuries that had its beginnings in the West. This is a false basis from which to begin. At the level of individual states the modern world contains no examples, nor has it ever, of an economic system based fully on market forces. Even for those politicians who most desire this, it remains an unattainable goal. All macroeconomic systems represent a balance, a compromise, an uneasy truce between two forces: the urge of the state to provide itself with a secure base for its own existence and its plans, and the fragmented pressure of private demand.

At one end of the spectrum we have those states that, for reasons of ideology (or sometimes the exigencies of war), institute a wholly administered economy. The former Soviet-bloc countries offered the most obvious examples for a good part of the twentieth century. They used modern means to achieve something now familiar from studying ancient systems: 'redistribution' (a word which, in archaeology, has come to mean widespread centralized collection of produce which is subsequently disbursed on a similarly large scale). Within systems of this kind economic transactions are intended to achieve egalitarian social goals and are thus 'embedded' within a political ideology which aims to engineer a particular set of social and economic relationships (socialism in these cases). For such a system to work as its creators

intend it must be sufficiently sensitive in its prediction of personal demands and circumstances, and flexible in its response with the supply of goods and services so that all people are content. All modern systems fail to meet the immensity of the task, and where failure occurs a market solution arises, although the modern world misleadingly renames a normal market response within a controlled economy a 'black market' and takes steps to suppress it. The 'black market' simply fills the interstices within a megalithic system.

Then there are those states dedicated to market freedom. This philosophy is in its application, however, invariably restricted. It flourishes most obviously in the manufacturing and retailing of consumer products. Modern states of this kind nevertheless retain huge administered sectors: civil service, armed forces, defence procurement, farm price support, unemployment benefit, social insurance schemes and control of the banking system within which the free market operates. Modern market-sector states are large employers and (through welfare schemes) supporters of people, and large purchasers of many things, including money, yet are themselves not commercial organizations ruled by the maximization of profit and minimization of loss (even though, through 'outsourcing' and 'privatization', they try to achieve this at arm's length). At anything other than the local scale the self-regulating, price-fixing market responsive wholly to supply and demand is an illusion. Modern market mechanisms remain embedded within and draw for part of their performance on the administered state sector, not least the state's almost invariable control of the banking system, levels of taxation and supply of money, a sector which is in turn embedded within broader notional considerations such as 'national interest', 'party political agendas', 'social and moral responsibility', and so on. The threshold that 'privatization' dares not cross is the issuing of currency free from regulation, so that 'forgery' or 'counterfeiting' become simply a market opportunity. Free-market economics applies to the manufacture of cane furniture but not to the printing of paper money. The severity of the penalties for the latter is an indication of the extent to which a notional free market in commodities is in the end controlled by governments and is not therefore free. It is this threshold that, more than any other, separates the modern from the ancient world. And from this perspective ancient economies based on commodities came closer to the ideal of the free market than do modern economies based on money, the viability of which depends much upon manipulation and confidence (a particular kind of belief).

More will be said on this at the end of this chapter.

We should also be attentive to the difference in the modern world between economics and economic policy or management. Often the word 'economics' is used in a general sense to mean 'the study of mankind in the ordinary business of life' (the definition offered by a leading economist of the time, Alfred Marshall, in 1920). At a modern professional level, however, economics is a rigorous subject of study, akin to the sciences and much dependent upon mathematics. When economists turn their attention to how the economies of whole societies should be managed, however, the subject takes on a more familiar character. Rival interpretations emerge which depend much upon belief and are exchanged in a style of argument that is essentially sectarian. Myths proliferate.[2]

What has this to do with the study of the ancient past? All modern macroeconomic systems, despite huge differences in philosophy and practice, represent different mixes of the same two basic ingredients: state ambition on the one hand, and private demand for more than an egalitarian share-out of the state's resources on the other. Whether we focus on states devoted to free enterprise that may wish to withdraw from final economic control, or those with an entirely contrary philosophy, we find in reality that they merely shift the boundaries between the two zones. We are thus entitled to ask of past systems: do they, too, represent a mix of their own within a universal and inescapable macroeconomic structure created when the first states emerged, allowing for the possibility that, like the modern 'black market', some aspects may appear in a different guise?

No doubt attaches itself to one side of the ancient mix: that directed by institutional administration, of the redistributive kind. This is not the case, however, with the other side: the satisfaction of individual demand, where the emphasis in modern studies is often to minimize its economic power. If, as is sometimes argued for ancient states such as Egypt, we regard the administered economy as overwhelmingly dominant, we have to accept that one of two conditions was present: either the system itself was able constantly to assess every individual's real needs and satisfy them, or the needs of very large sections of the population remained not so much static as passive, offering a mirror image of fluctuations within the state system, that is, when the state had less to give out, people resigned themselves to receiving less. For the first condition, had it ever existed it would have to be regarded as one of the lost arts of antiquity, since it would represent a level of economic management that eludes the grasp of all modern

governments. For the second, however, we have to consider both the nature of ancient demand and the extent to which ancient systems were static.

The state sector: its power and its failings

The administered, redistributive side to the Egyptian economy is too well known to require much explanation. Several papyri or groups of papyri document specific instances in considerable detail for the various periods, and to these major sources we can add a host of minor ones. Chapters 4 and 6 covered some of the relevant ground. We can utilize archaeological evidence, including huge granaries, witnesses to the scale of the state's maintenance of buffer stocks of grain, which evened out fluctuations in supply brought about by varying harvest yields over the years. To illustrate their magnitude, in the last chapter attention was directed towards one particular example: at the Ramesseum (Figure 6.6, p. 259 and Photograph 6.2 p. 260). Their passive economic weight should not be underestimated. Economic performance is a cyclic affair, and in the modern world state control of key sectors acts to bridge the gap between the inevitable peaks and troughs. We understand far too little of pure economic interactions in the ancient world to be able to model the changing economic climate which we must recognize was a major and ever-present factor, but in the case of Egypt we can be sure of one cyclic element: that of the volume of Nile waters. The annual inundation, the key to agriculture, not only varied from year to year, but was also subject to broader climatic cycles which, over a period of time, would have had inexorable consequences for the agrarian economy. The intervention of the state (palace and temples) would have had a powerful cushioning effect.

It was not a monolithic system. As we have seen, alongside the palace and its various centres of administrative authority there was a complex network of quasi-autonomous institutions where the focus of attention was the cult of statues of gods, kings and revered individuals. All these institutions were, to varying degrees, collectors of revenue, storing part and distributing part as rations or wages. The number of people who benefited seems sometimes to have been deliberately multiplied through the phyle system, which shared out temple duties (and benefits) on a part-time basis. As we have seen, it was the Middle Kingdom that seems to have progressed furthest down

this particular road.

An important general point arises here. It is legitimate to regard ancient societies as 'systems'. Their component parts and lines of interaction can be identified and laid out diagrammatically like a modern management flow-chart. It is a valuable perspective, but it carries a semantic pitfall. We may identify systems in the workings of ancient societies, but they need not have been at all systematic, for the latter word implies a prominent degree of reason and interest in consistency. The workings of the Egyptian administration at its various periods are reasonably apparent, but they seem not to be the product of an abstract concept of administration applied across a broad spectrum of activities. Far from it. The system ran in channels of authority. Within any one channel, the procedures could be remarkably effective (though not efficient) in achieving a given target of the kind: quarry, transport and erect a colossus of a particular size. This is where bureaucratic talents flourished. But we will look in vain for evidence of conscious integration of the individual parts into a general scheme of management. The working of the Egyptian administration is another example of self-organization, of a system evolving its coherence through innumerable local adjustments to circumstances, the 'checks and balances' process which prevents societies, for most of the time, from straying far from a common path.

One document from the New Kingdom brings out very clearly how ancient government consisted of an accumulation of individual institutional arrangements of very restricted scope. This is the Edict of Horemheb (*c*. 1320 BC).[3] When the Edict was issued the Amarna Period had just ended and the military leader Horemheb had become king. It might be anticipated that this would be a time of reorganization throughout the country, and of the reassertion of royal power of a traditional form. But the first part of the Edict is a collection of individual royal decrees directed against specific cases of wrongful or excessive collection of revenues by various groups of persons responsible to the king. They give the distinct impression of being responses to individual petitions of complaint rather than of being the result of a considered exercise in overhauling the administration generally. In so doing they imply that there was no codified system of revenue collection as we might understand it. In its place there was a range of individual practices sanctified by tradition. One group of officials did this, another did that. In one case the tradition was of recent memory. A separately mentioned authority in the Edict is the royal harim which had its own revenue-raising

powers. Every year the king and some of his household travelled upstream to Thebes for the Festival of Opet. The job of feeding them en route had been passed on, in the time of Tuthmosis III, to the mayors of local towns. The officials of the queen and of the royal harim had turned this into a predatory affair which the Edict now tried to correct. It is tempting to imagine an irascible queen making up for the boredom of a long journey away from the comforts of her own palace by preying on hapless provincial mayors, and of thereby creating a little administrative tradition. But to think in this way is to reveal an uncomfortable truth about academic scholarship: it takes on life only when it breathes in the vapours of historical fiction.

Because ancient Egypt was for long periods successful as a complex society we have to accept none the less that some kind of overall economic balancing act prevailed. Part of the process lay in what was, in effect, a massive delegation of short-term management through foundations that served cults, where the nominal owner was actually imaginary yet the object of respect. We have already, in the last chapter, commented on the symbiotic relationship between temples and palaces. Their status as centres embedded within the overall ideology of the state and their internal bureaucracies gave them the authority and means to function effectively but not divisively. In the longer term, however, they were subject to a process of piecemeal adjustment in which older and less prestigious foundations lost their benefactions to newer foundations. The notion that cults were founded for eternity was a myth that did not hinder state interference. In revenue and expenditure terms the sum of their activities plus a general level of royal expenditure on court life, on large and thus long-term building programmes, and on the military, represented a general 'budget' or balance-sheet for the country. Complaints from below of insufficient resources would have signalled to senior officials a degree of imbalance, which they could then have sought to correct. This is how self-organization works: through local re-adjustments of the profiles of component elements in a system which has not been forced into inflexibility; in other words, through feedback.

The basic level of royal expenditure was maintained partly through the income of lands and other productive resources directly owned, partly through revenue-raising powers bestowed on particular officials of particular institutions, and partly through a country-wide tax levy. From time to time this was recalculated, presumably in response to perceived shortfalls in revenue.[4] The one detailed record we have of a general tax levied on provincial towns and districts for the benefit of

the king (through his vizier) is the taxation scene in the tomb of Rekhmira at Thebes (Figure 7.1).[5] This source implies, however, that the amounts raised in this way were modest. Yet particular circumstances regularly created extra if short-lived demands. The procedure then was simply to pass them down the administrative channels. Ideally such a demand would be accompanied by an order to release some of the state's buffer stocks from the magazines of a convenient institution to cover the demand. In practice, however, this did not always work. An *ad hoc* solution was expected, and this could be found either by a peremptory local demand on whomsoever was vulnerable, or by raiding the resources of another area of administration.

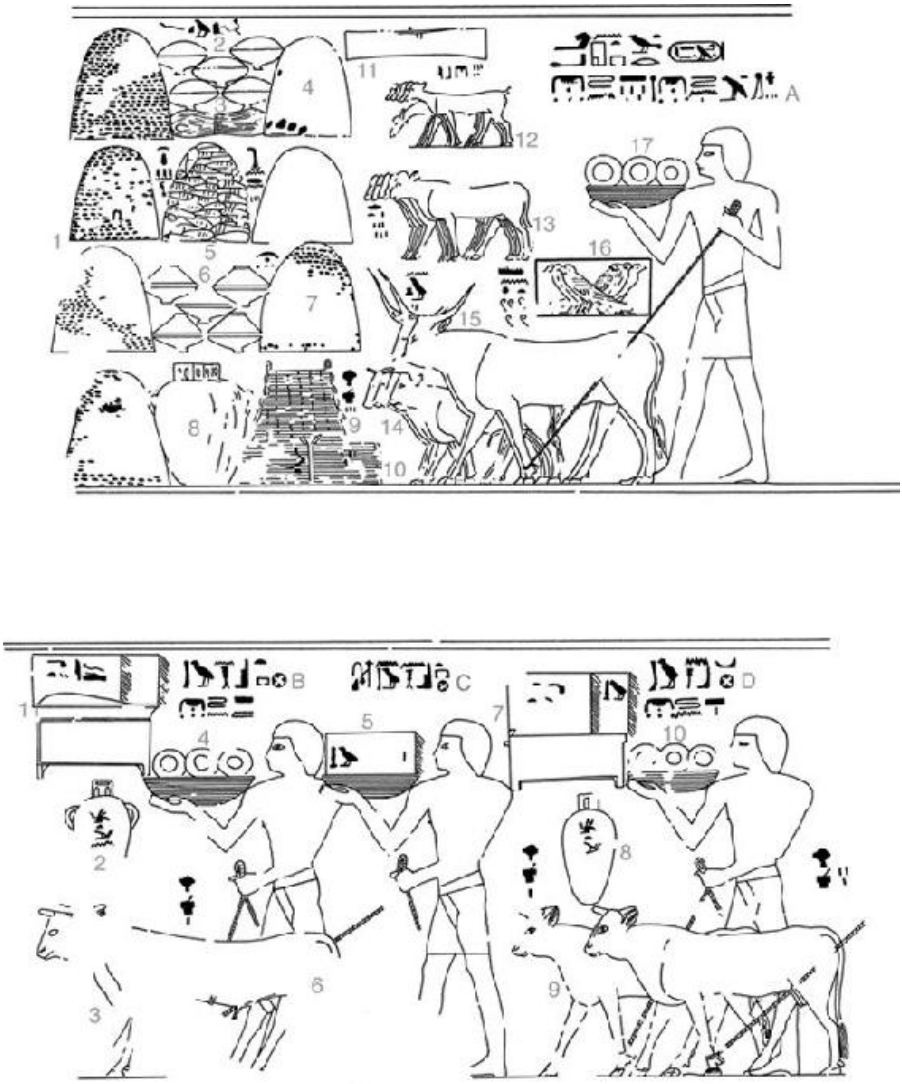


*Figure 7.1*Paying in kind: local taxation in a cashless economy, illustrated by a portion of the revenue scene from the tomb of the vizier Rekhmira (no. 100 at Thebes), mid-Eighteenth Dynasty. Not all commodities can be identified. *Top*. (A) Taxes delivered by the 'mayor of (the town) of Huwet-weret-Amenemhat' (somewhere to the south of Abydos). (1): four heaps of barley; (2): cakes; (3): rope; (4): *dôm*-nuts; (5): cakes; (6): spices (?); (7): carob beans; (8): honey (?); (9): sacks; (10): reed mats; (11): grass mats; (12): 6 goats; (13): 5 calves; (14): 4 head of cattle; (15): 2 head of long-horned cattle; (16): 500 pigeons; (17): 2 gold, 1 silver ring-ingots. *Bottom*. (B) 'The recorder of the town of Wahsut' (Abydos South; see Figure 5.14, p. 222), and (C) 'The scribe of the recorder of the town of Wahsut'. (1): 2 lengths of linen cloth in a chest; (2): honey; (3): 1 head of cattle; (4): 3 gold ring-ingots. (5): 1 linen garment; (6): 1 head of cattle; (D) 'The recorder of Abydos'; (7): 1 length of cloth and 1 garment in a chest; (8): honey; (9): 1 head of cattle; (10): 2 gold, 1 silver ring-ingots. After Davies, *Rekh-mi-rē*', Pl. XXXIV; P.E. Newberry, *The Life of Rekhmara*, London, 1900, Constable, Pl. VI.

The ill-feeling generated by the tangle of individual systems of revenue collection, by which institutions and groups of officials quite literally lived off the land, is illustrated by a second document from the New Kingdom, the Nauri Decree of Seti I.[6] It belongs to the reign of one of the 'great' kings, so lifting it above the charge that it reveals a good system going wrong under a bad king. One of the principal projects of Seti I was the building of a sumptuously decorated and equipped temple for Amun and Osiris at Abydos. As was customary he donated sufficient land and other sources of income to make the temple a permanently wealthy institution. Some of the land lay far away in the conquered territories of Sudan (the southern part of Nubia, called Kush). The purpose of the decree was to protect the new donations from other official institutions whose agents might arrive at some distant farm or cattle station and demand payment of a tax. For such officials, the punishments were fierce: heavy fines, beatings and mutilations. Every year, too, a flotilla of ships set off from the Nubian lands on the long journey downstream not only to replenish the huge storerooms attached to the temple with the year's Nubian harvest, but also to bring exotic trade goods purchased through barter by 'traders' employed by the temple. On its long journey downstream, the flotilla passed Egyptian fortresses whose real job it was to protect Egyptian life and property. One must have lain near Nauri, a lonely, isolated place:

> As for any commander of the (local) fortress, and scribe of the fortress, any inspector belonging to the fortress who shall board a boat belonging to the Temple and shall take gold, [ivory, ebony?], leopard and other animal skins, giraffes' tails, giraffes' hides, etc., any goods of Kush which are brought as revenue to the Temple, punishment shall be meted out to him in the form of one hundred blows, and he shall be fined on behalf of the Temple in terms of the value of the goods at the rate of eighty to one.[7]

The remoteness and isolation of Nauri does not, in itself, make the decree an exception. The full text makes it clear that the Nauri version was only one copy of a decree that applied to the open farmlands of Nubia where Egyptian colonial towns had been built and a full Egyptian-style administration functioned. Nor is the decree itself unique for its period. Others are known across several reigns, including one of Rameses III from Elephantine and others from the

Ramesside period from Karnak, Armant, Hermopolis and Kanais (Wadi Mia).[8] Indeed, the tradition of decrees to protect individual institutions from the exactions of others goes back to the Old Kingdom.[9]

Government in ancient Egypt was by royal decree, the system of administration was the sum of those decrees, and the resulting overlaps and confusions of responsibility were tackled by fresh decrees in response to specific complaints. The Edict of Horemheb attempted to do this across a broad range of conflicts of interest. This cycle of decision, then petition of complaint and finally redress was a basic part of bureaucratic life, to the extent that collections of model letters used in the training of scribes often contained a model letter or petition of complaint.[10] The universal picture of the rapacious tax-collector and the suffering peasant is joined in ancient Egypt by the picture of the predatory official victimizing his colleague.

The state sector of the Egyptian economy existed to satisfy institutional demands, and must have had very limited flexibility. For it also to have satisfied most private demand, that demand must have been of low intensity. We need to look next, therefore, at the real pattern of private demand.

The power of private demand

When we turn to the record of archaeology, especially that from cemeteries, it is very clear that during the latter part of the Predynastic Period Egyptian society entered that crucial stage of social and psychological development which is still with us: conspicuous consumption (in which greed and pride quickly overtake the satisfaction of what is needed to survive). The creation of large and striking private tombs and the accumulation of burial goods affected the whole of Egypt geographically, and created an aspiration that penetrated deeply into society. Conspicuous consumption is not incompatible with the redistributive economy. Social obligation brings the two together: the king rewards his great men, many of them having provincial connections. They in turn pass on bounty to poorer relatives and dependants. Wealth ‘trickles down’, to borrow a phrase used (in a wishful way) by modern enthusiasts of free-market economics (the effective working of which does not require social obligation). Everyone is satisfied (or unable to articulate their dissatisfaction in economic terms), and in death takes their place in a

cemetery which likewise reflects the social and economic order: local leaders in centrally placed handsome tombs surrounded by myriad smaller tombs of lesser folk (Naga el-Deir and Beni Hasan providing fine examples from the Old and Middle Kingdoms, respectively).[11] We can, if we are sufficiently selective, make Egypt into a model of the redistributive economy.

At a political level (i.e. in the wish to exercise power), however, the Old Kingdom shows that the ideal of consensus is an illusion. Provincial governors (nomarchs) appeared, and when, at the end of the Sixth Dynasty, occasion allowed, the more ambitious amongst them strove by any means to carve out larger territories for themselves, leading in some cases to civil war.[12] The politics of self-interest were well and truly alive. Indeed, the processes of state formation and periodic re-formation derived their energies from them. The sense of social obligation was not necessarily lost, the classic example being Ankhtify the nomarch of Hierakonpolis who, having taken over the neighbouring nome of Edfu early in the First Intermediate Period, found himself distributing famine relief over a huge territory. Ankhtify, having seized lands, was, for a short time, in effect ruling a miniature state.[13] He and others like him at the time had rediscovered the path of state formation, although now with the knowledge – the traditions of the Old Kingdom – of what a state should look like. Although we cannot, as yet, sufficiently isolate the range of factors at work, this release of energy at the local level seems to be marked in Upper Egypt by an expansion of towns at the end of the Old Kingdom and the early First Intermediate Period.[14]

Famine relief is a special case of obligation. Would Ankhtify have also headed an administration capable of satisfying normal demands? We lack the archaeological evidence from contemporary cemeteries in his own area that would enable us to see for ourselves how people in his territory fared. Further north, however, in Middle Egypt we have a particularly well-documented cemetery record for this and the preceding periods. This is the work of the archaeologist Guy Brunton in the Qau/Badari/Matmar/Mostagedda (El-Mostageda, see Figure 0.1, p. 13) areas in the 1930s.[15] In the First Intermediate Period this belonged to the frontier zone between the warring dynasties of Herakleopolis and Thebes, although the role of the local nome administrator is nowhere made clear in the surviving sources. The period (which Brunton termed the 'vii–viiith dyn.') is particularly well represented by burials. Their grave goods show no sign of general impoverishment. Brunton addressed himself particularly to this point:

> In the cemeteries at Qau and Badari the tombs with the most objects are precisely those of the vii–viiith dyn. period. Here we find the greatest profusion of beads and amulets; no diminution in the number of alabaster vases, and all the alabaster head-rests; the greatest number of mirrors of any period; and the least number of simple shallow graves. The workmanship of the glaze amulets may show great delicacy; the carnelian legs are the best of their kind; and the animal-backed seal-amulets are cut with skill and care.[16]

Brunton then showed that more gold beads and amulets occurred in this period as well. It is unreasonable to argue that this was mostly material robbed from earlier graves because much of it is in styles peculiar to the period. Nor were these graves clustered around large centrally placed tombs of leaders and providers. They occur in a series of small cemeteries spread out along the edge of the desert as if representing the burials of a wide scatter of villages. It strains credulity to suppose that these people were passive recipients of a state redistributive system, which was, by its nature, of limited flexibility.

The anonymous people of Qau and Badari accumulated possessions during a time of change that, in its magnitude, was unusual in the course of Pharaonic history. But although ancient economies were not open to the volatility of modern times it is a mistake to think of them as static. Overall between, say, 2100 and 1500 bc, the boundaries of state power ebbed and flowed in two cycles of great magnitude (the first two 'Intermediate Periods'). And at the best of times, when famines and civil war were no more, the state system still had to adjust to change, particularly demands made by ambitious kings. New temples (even new cities, as with Amarna and Per-Rameses), new fleets of ships, the re-equipping of the army for fresh campaigns: these could create sudden demands both for the redirection of existing resources and for additional revenue. Any economic system that we propose for ancient Egypt has to be able to account for the apparently successful adjustments which local communities made to changes of different magnitudes within a relatively crude state system of economic direction.

As modern societies have found, 'consuming' is good for economic growth. The act of consumption often though not inevitably involves destruction: the food is eaten and then burnt off as energy, the car is driven but is later crushed. Both need to be constantly replaced and

this is good for farmers and car makers. Consumerism ought to work just as well, however, if the goods once purchased were placed directly into a hole in the ground. What one needs is a set of beliefs to make it seem worthwhile. Providing for the eternal existence of the dead is just such a set of beliefs. Whether burial goods in ancient Egypt were purpose-made and purchased for that end alone, whether a person set things aside during life, left it to heirs to select from what was available or when friends and the kindly disposed contributed items of their own as gifts, the effect was the same: theoretically a bottomless hole into which a proportion of the country's goods were cast, creating a constant demand for replacement – theoretically, because tomb robbery constantly brought some of it back in a clandestine recycling. In the case of the most favoured officials the royal resources might well assist in providing the labour for cutting and decorating the tomb as well as a coffin and other things for the burial itself. This is claimed in inscriptions.[17] But for the majority, the cost of burial was a private matter. Private responsibility for a good burial was enshrined within the law: '"Let the possessions be given to him who buries", says the law of Pharaoh.' So declares one New Kingdom party in a case of disputed inheritance. This document, with others, shows that the normal pattern of inheritance of property was subject to the proviso that the whole inheritance would go to whomsoever undertook to have the actual burial carried out.[18] A potential heir would disinherit himself or herself by ignoring this. The practice and the kind of costs involved for non-officials are illustrated by the case of the man Huy (from Deir el-Medina), buried by his wife Iy. She apparently inherits from him since she orders a coffin and pays for it with a house originally belonging to her husband. In relative terms this was a heavy expense involving the sale of a house, although the hope of inheritance must have made the weight of obligation easier to bear.

A good burial, however, was only part of the economic pressure in private demand. A prospering official might seek to build a new house for himself. This is promised in New Kingdom school texts,[19] but we also have a real letter on the subject written by a provincial mayor (possibly of Armant) of the Eighteenth Dynasty called Menthuhetep to a friendly and, as a deputy to a 'chief of works', a usefully placed official at Thebes, a 'scribe' called Ahmose. The subject matter is instructions on the early stages of building a new house for Menthuhetep, a house which, to judge from its dimensions, was to be an impressive one. Here we probably have a case of a provincial

dignitary setting up a second house in a royal city, in this instance Thebes, and clearly paying for it himself. For at the end of the letter he adds: 'have the price of the land for the house given to its owner, and make sure he is happy with it. See to it that when I come he doesn't have words with me.'[20]

Then there were the goods that daughters and sons needed to acquire to create the joint properties which formed the basis of a marriage contract; there were outlays to be made at shrines, possible gifts or bribes for advancement, and the general competitive display of wealth engendered by the existence of an ostentatious and lavish court. Apart from the property and goods which the excavation of settlements and cemeteries reveals, other sources tell us that officials maintained fleets of Nile boats (Figure 7.2) and, in the New Kingdom, horses and chariots as well. People were surrounded by reasons (or rather temptations) to accumulate wealth, which might arise quite suddenly. The effects of a relatively free play of competitive acquisition unconnected with burial customs will be illustrated in the next chapter by the spread of private house sizes at Amarna.

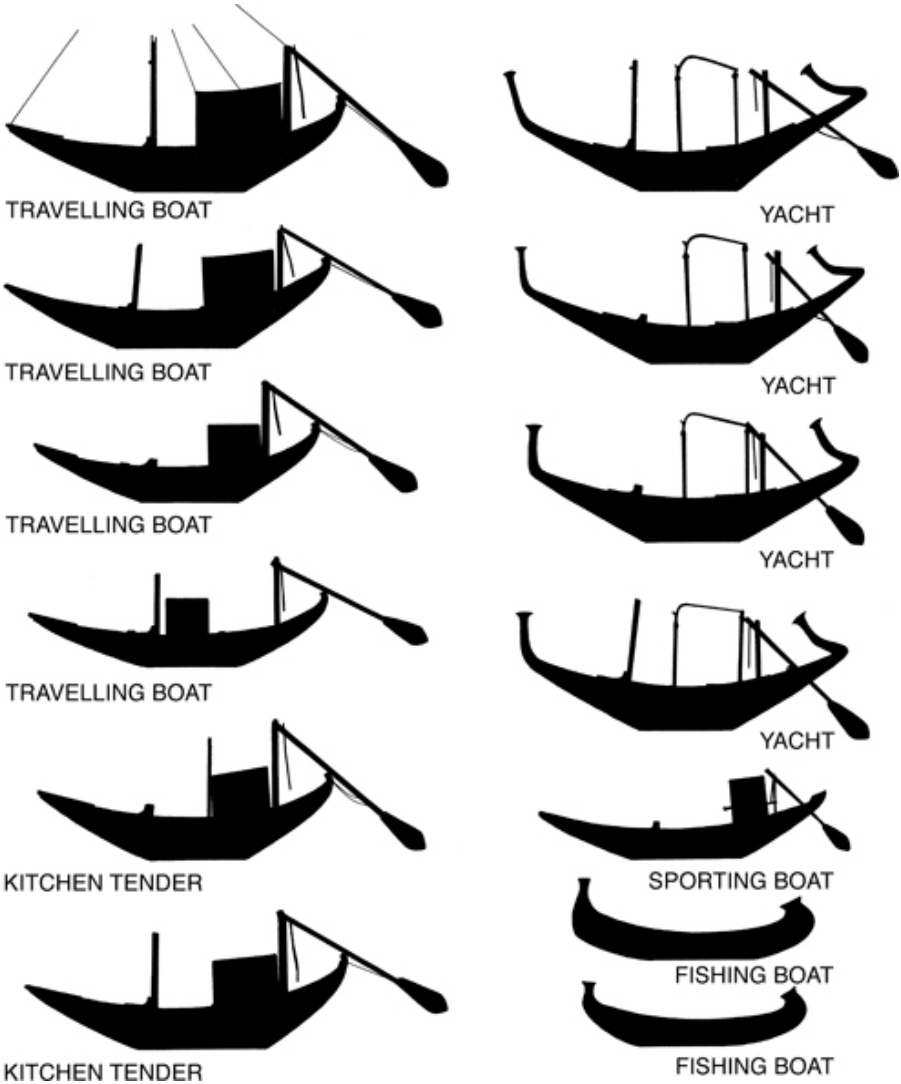


*Figure 7.2*Affluence: Chancellor Meketra's river fleet. Silhouettes of the wooden boat models from his tomb at Thebes, early Twelfth Dynasty, after Winlock, *Models*, Figs 70–82.

It is occasionally possible to find in ancient texts a degree of reservation on acquisitiveness: 'A cup of water quenches thirst, a mouthful of herbs fortifies the heart' is the ascetic advice of the sage to the vizier Kagemni.[21] At the other extreme, however, were those who made the best of whatever chances for enrichment came their way. The late New Kingdom provides some spectacular documentation (in the form of an archive of papyri dealing with investigations and trials) concerning the promise of instant enrichment through theft.[22] Nothing was sacred: temple grain supplies were siphoned off, tombs

were robbed, temple equipment and fittings were plundered. Although tomb robbery attracted people of mainly lowly status, less arduous forms of theft and dishonesty drew in officials as well, including temple personnel. Indeed, the scale of the thefts often required official participation. Apart from depicting the seamier side to the crumbling fabric of late New Kingdom society and also the processes of law when they were eventually invoked, the papyri illustrate in a highly coloured way motives and means in the contemporary economy. They dramatize the existence of a crude urge for self-enrichment, which in more orderly circumstances would have been sublimated by participation in the marketplace, selling goods, renting or leasing land, making loans bearing interest, all of them practices explicitly documented. They also reveal the fate of the stolen goods as they re-enter the economy of the living, and in so doing add usefully to our restricted knowledge of the economic behaviour of the time.

The thieves generally, even when of lowly status, were town or village dwellers and householders, many apparently living in the medium-sized town of Maiunehes which lay in and around the mortuary temple of Rameses III (Medinet Habu, Figure 8.17, p. 362). Much of what they stole they simply kept as part of their household property. Apart from gold and silver the lists of recovered goods include a fair quantity of linen pieces and garments, vases of oil, coffin trimmings and pieces of wood. Copper and bronze in any form was much favoured. A set of bronze carrying-rings that had been prized off a wooden chest was the haul from temple theft (Papyrus B.M.10402). One list of recovered goods consists almost entirely of these metals. Sometimes the item is specified – 'a wash-bowl of bronze equal to 20 *deben*' – but mostly a figure of how many *deben* were involved is given, and the amounts could be quite small: 'The lady Aref of the Necropolis, wife of the workman Hori: 1; the lady Takiri of the Necropolis: 1' (Papyrus B.M.10053, Recto 2.18–19). One *deben* was only half the price of a pair of sandals.

In the end, however, material wealth was the means of purchase. The wife of one of the thieves confesses: 'I took my husband's share and put it aside in my storeroom, then I took one *deben* of silver from it and used it to buy grain' (Papyrus B.M.10052, 6.6–7). Another wife, smarter (or perhaps more honest), when asked how she bought servants if not by stolen silver, replied: 'I bought them in exchange for garden produce' (Papyrus B.M.10052, 10.14–15). Though her words may sound naive she clearly hoped to be believed and was, in effect, basing her case on being able to grow cash crops on a significant

scale, an important point in itself. An equally positive defence was given by another wife when asked to explain the origin of a quantity of silver: 'I got it in exchange for barley in the year of the hyenas, when there was a famine' (Papyrus B.M.10052, 11.5–8). Here the claim is based on scarcity driving up the price of a basic commodity, a classic supply–demand relationship. A more elaborate case is provided by the confession of another priest and temple gardener Ker on the subject of stripping gold foil from the temple doors:

> We went yet again to the door-jambs … and we brought away 5 *kite* of gold. We bought corn with it in Thebes and divided it up … Now after some days Peminu our superior quarrelled with us saying: 'You have given me nothing.' So we went again to the door-jambs and brought 5 *kite* of gold from them, and exchanged it for an ox and gave it to Peminu. (Papyrus B.M.10053, Verso 3.10–13)

We should note that Peminu preferred good farm livestock to a suspicious quantity of gold foil.

Many more examples can be quoted to illustrate the variety of purchases. 'Charge concerning the shrine of cedar, both the image and the timber, which the scribe of the royal records Setekhmes stole. He sold it in Thebes and received its price' (Papyrus B.M.10053, Verso 5.5). The overseer of the field of the temple of Amun, Akhenmenu, gives '1 *deben* of silver and 5 *kite* of gold in exchange for land' (Papyrus B.M.10052, 2.19). The scribe Amenhetep called Seret, of the temple of Amun, gives '2 *deben* (of silver) in exchange for land, for 40 *deben* of bronze, and for 10 *khar* of barley' (Papyrus B.M.10052, 2.22). The servant Shedbeg disposes of quite a list of commodities 'in payment for the slave Degay' (Papyrus B.M.10052, 2.23–25). Another confesses: 'I gave 5 *kite* of silver to the incense-roaster Penementenakht of the temple of Amun in exchange for 10 *hin* of honey' (Papyrus B.M.10052, 2a.1; cf. also lines 4–14). The confession of the herdsman Bukhaaf begins: 'The lady Nesmut came to where I was and said to me: "Some men have found something that can be sold for bread. Let's go so that you can eat it with them"' (Papyrus B.M.10052, 1.8–10). We can recognize Theban slang here: 'bread' must mean 'fine goods', or something similar.

Sometimes the loot was needed to buy services, in the form of protection: 'Now when we were arrested, the district scribe Khaemipet came to me … and I gave him the 4 *kite* of gold which had fallen to

my lot' (Papyrus B.M.10054). And in another case: 'But the scribe of the royal records, Setekhmes, had overheard and threatened us saying: "I am going to report it to the chief priest of Amun." So we brought 3 *kite* of gold and gave it to the scribe of the royal records, Setekhmes' (Papyrus B.M.10053, Verso 3.13–14). Some disposals were probably to settle obligations or to gain favours:

> Charge concerning the 4 boards of cedar belonging to the 'Floor of Silver' of King Usermaatra-Setepenra (Rameses II), the great god, which the scribe Sedi gave to the lady Teherer, wife of the god's father Hori: he gave them to the carpenter Ahauty of the funerary chapel of Hui, and he made them into an inner coffin for her. (Papyrus B.M.10053, Verso 4.15–17)

Perhaps the most intriguing entry from the economic point of view is a list of gold and silver 'recovered from the thieving workmen of the Necropolis, which they were found to have given to the traders of every establishment' (Papyrus B.M.10068, Recto 4.1–18). Fourteen traders are listed, attached both to temples and to private households. It was the job of a 'trader' to maintain the supply–demand balance of an employer by trading surplus or unwanted commodities for whatever was required. These thieves, who would not have been in a position to have 'traders' in their own employ, were therefore latching on to a professional system for converting their loot into other commodities, doubtless for a commission. As urban dwellers in Maiunehes (where the necropolis workmen now lived) they had channels of communication with a wider world.

The rotten state of society at the end of the New Kingdom was cured, if only temporarily, by the imposition of military rule. The legal papyri of the time are not necessarily a guide to the state of affairs earlier in the period (though one cannot be wholly sure). They are relevant because they provide verbatim testimony to attitudes to material wealth and to the easy and natural recourse that people had to a free market in goods, slaves, livestock, food and even land. It would be foolish to claim that the opportunities for exchange, the markets themselves, were created by the dishonesty of the day. In more orderly times people still received windfalls – from inheritance, gifts from the state – and had a similar range of choices in what they did with them, hoarding them at home or exchanging them for other things. The late New Kingdom robberies released a surge of wealth into society from, as it were, the bottom. The Eighteenth Dynasty had

done the same, from spoils of battle, but from the top and according to an administered system.

One discovery (at Amarna) does actually reveal that concentrations of liquid wealth were in circulation in this earlier time. In a small open space beside a public well in the North Suburb a pottery jar had been buried, containing 23 bars of gold and a quantity of silver fragments and roughly made rings, as well as a silver figurine of a Hittite god (Figure 7.3).[23] The gold bars had been made by pouring melted-down gold into grooves scooped by the finger in sand. The total weight of the gold was 3,375.36 grams, equivalent in ancient terms to 37 *deben*. The total weight of the silver came to at least 1,085.85, or 12 *deben*. This represents a fair amount of wealth, though not a staggering sum. The most successful of the recorded late New Kingdom tomb robberies, in the tomb of the Seventeenth Dynasty King Sebekemsaf, netted the thieves 160 *deben* of gold (Papyrus Leopold-Amherst II, 1, 16–3.2). But some idea of its purchasing power can be obtained from the ratios of gold to silver (5:3 later becoming 2:1), and of silver to bronze (1:100).Thus the silver could have been used to purchase, say, 10 or 12 head of cattle. The archaeologist who made the Amarna find assumed that it was part of a thief's loot, and in view of the odd place in which it was found this still seems credible, although there are other possibilities. Stock from a jeweller's workshop has also been suggested.[24] Yet we cannot be sure that the only remarkable thing about the find is simply that someone had failed to recover it. There is an uncanny parallel in a letter from a slightly later period (and unconnected with Amarna) in which the writer gives instructions as to where, in the pigsty beside the house, a mass of bronzework was buried and, alongside it, a pottery jar containing a hoard of gold and silver items.[25] Secret burial around one's house might not have been uncommon. Whatever the origin of the Amarna hoard, it illustrates easily convertible wealth poised on the point of re-entering the economy at a private level.

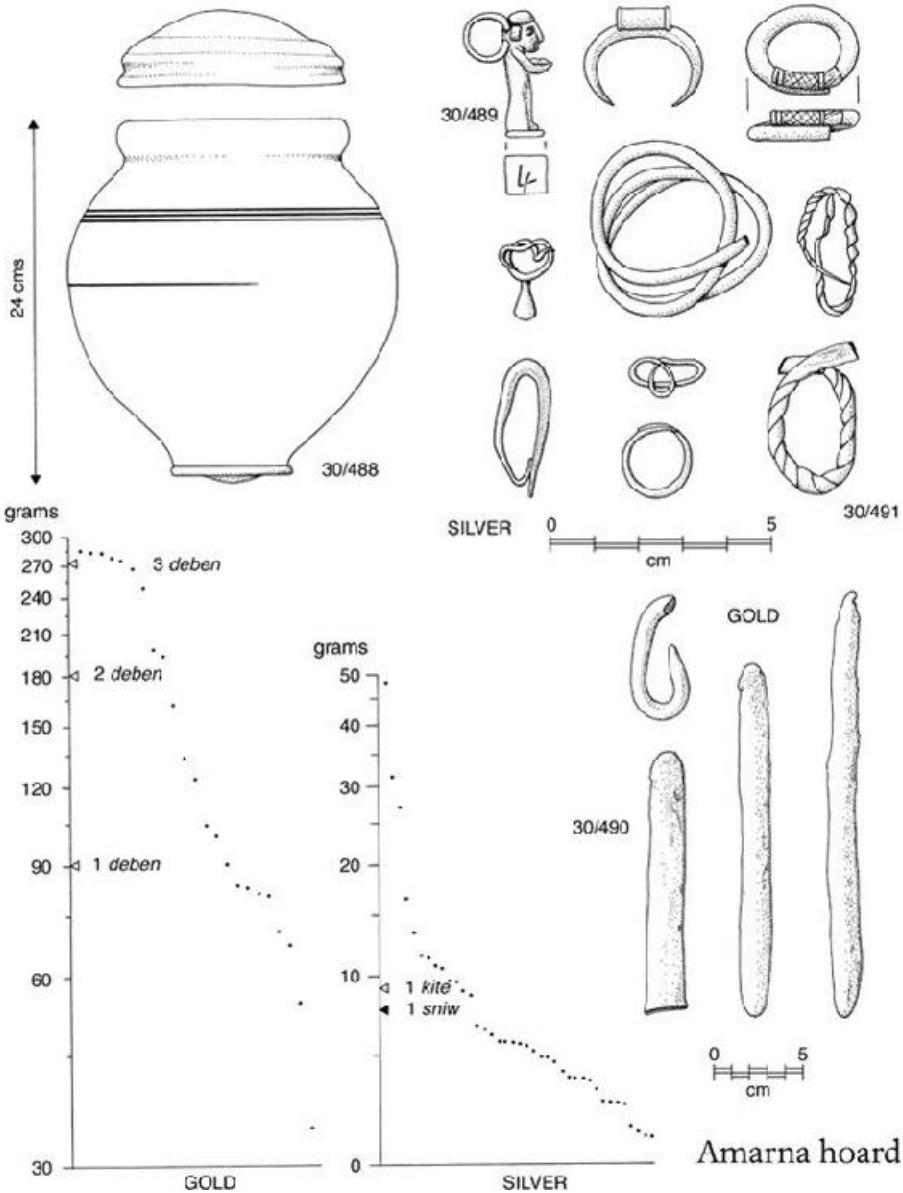


*Figure 7.3*Part of a hoard of gold and silver buried in a pottery jar in a suburb of Amarna. The silver is made up partly of finished items (including the Hittite figurine, no. 30/489), and partly of coils and irregular pieces, some cut from vessels; the gold is in crude bars. As the weight tables show, there is little to suggest that pieces of standard weight (proto-coins) were desired. Rather, with the coils, scraps and bars, pieces were cut off to meet a specific demand, their weight (and thus value) determined by weighing (as in Figures 7.6, p. 310, and 7.7, *above*, p. 313). After Frankfort and Pendlebury, *COA* II, 59–61, Pl. XLIII, and original record cards in the archives of the Egypt Exploration Society.

The satisfaction of private demand for finished goods required an

availability of raw materials. Official inscriptions are often taken to imply that a royal monopoly existed on those raw materials that lay outside the Nile floodplain. Inscriptions at mines and quarries do, indeed, reveal a scale of operations that only a state could undertake (e.g. Figure 3.1, p. 113). But these need not have been the norm. Take 'alabaster' (for which geologists prefer the term 'travertine'), for example. One prime source was the desert to the east of the Asyut-Minia area in Middle Egypt, the area that includes the Hatnub quarries.[26] Hatnub was one target for large expeditions despatched by kings. It can, however, easily be visited by donkey in a single day (the journey time is about three hours in each direction). If a group of people took with them a supply of water and food for a few days, some baskets and simple tools, they could bring back a sizable load of small lumps of alabaster suitable for vase making, perhaps using pieces left behind by the major expeditions. Simple operations of this kind might leave few traces behind. A further indication that written sources are not a full guide to the procurement of raw materials is that certain substances are excluded altogether. We have no records of expeditions to quarry the soft rock that was the basis for the marl clays widely used in pottery manufacture, and the same is true for natron and for gypsum.[27] There was no need for military-style expeditions. The work could be accomplished by small groups of hardy labourers camping and working in a primitive manner (such as at the Fayum gypsum quarries, Figure 7.4). By invoking a simple mode of supply we can easily explain the continued availability of raw materials during times of internal weakness. There was, for example, no shortage of small pieces of alabaster for the vase-makers of Middle Egypt in the First Intermediate Period, who produced a distinctive range of small elegant vessels that are common in the tombs of that period.

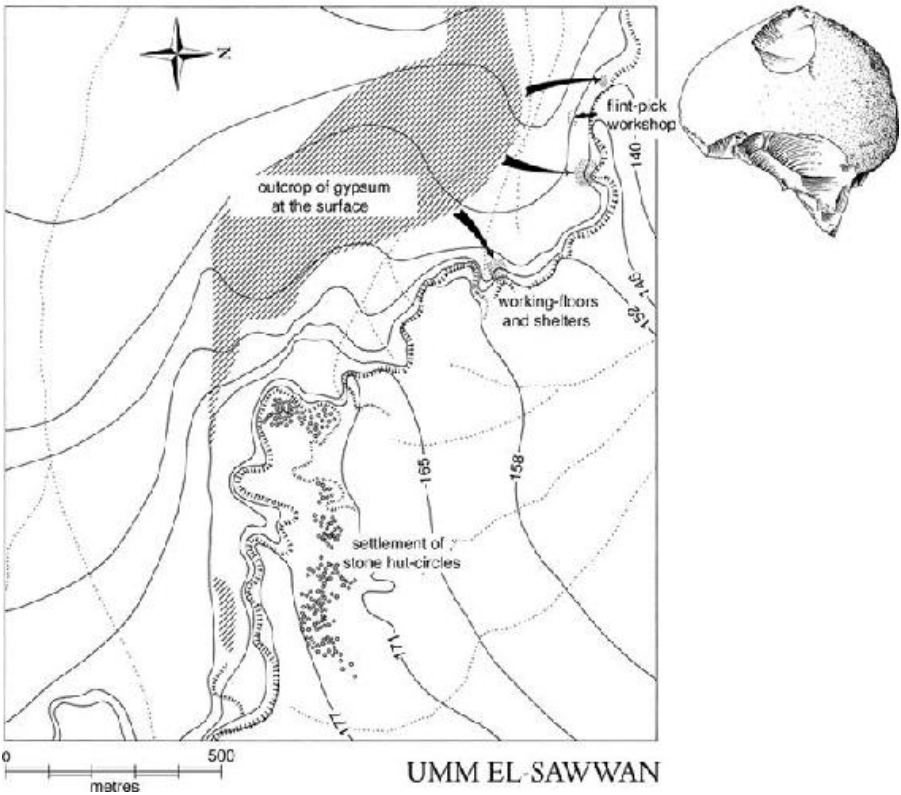


*Figure 7.4*Low-level exploitation of a mineral resource: the gypsum quarries of Umm el-Sawwan (north Fayum) of the early Old Kingdom. The seasonal encampment of about 200 circular stone shelters occupies the top of a ridge along the edge of an escarpment overlooking a broad surface outcrop of gypsum on the desert plain below. The gypsum was dug out, using crude flint picks, in part as lumps for the making of vessels, and in part as powder to be used (after heating) as mortar. The workshops for the vessels were in more sheltered places against the escarpment face. The flint picks were made on the spot, from flint nodules brought in from outside. Other types of flint tools were used in the vase making. The informal nature of the settlement should be contrasted with the planned Middle Kingdom workmen's village at Qasr el-Sagha, Figure 5.18, p. 227. After G. Caton-Thompson and E.W. Gardner, *The Desert Fayum*, London, Royal Anthropological Institute, 1934, Pl. LVIII. The example of a flint pick is one in the collection of the Museum of Archaeology and Anthropology, University of Cambridge.

In the Graeco-Roman Period natron was, with some other commodities, the subject of state monopoly. Monopoly is a word that is sometimes used for the Pharaonic period as well. Its earlier existence is, however, a matter of inference rather than of documentation, and does not accord with the general picture of people's attitudes in Pharaonic Egypt. The political stability and cultural coherence of ancient Egypt over long periods of time are part of its abiding image. They must reflect a broad acceptance of the ideas

and ideals that originated within the court. But beneath this bland law-abiding exterior lurked a predatory instinct directed towards property rather than persons. Institutionalized vigilance pursued elaborate schemes of checking, and threatened fearsome punishments. When it slipped, dishonesty quickly flourished. In this atmosphere, no monopoly could have relied upon a tacit acceptance of its validity. It, too, would have required enforcement by decrees and punishments. Within the corpus of administrative documents, we will look in vain for such references.

Even with foreign trade we should be cautious in using the term 'monopoly'. It is not, for example, the natural interpretation to place on a scene of the Twelfth Dynasty in the tomb of the nomarch Khnumhetep III at Beni Hasan which shows the arrival of a small Palestinian group from Moab bringing a quantity of eye-paint (*msdmt*) with them (Figure 7.5).[28] Although one of Khnumhetep's titles, 'administrator of the eastern desert', suggests some formally recognized responsibility for the adjacent desert area, the general intention of the scene is clear enough. The Palestinian group represents just one part of the broad range of products of Khnumhetep's 'estate', which included game hunted in the desert as well as agricultural produce from the Nile floodplain. Indeed, the Palestinians are introduced by a 'chief of the huntsmen'. Here again we have a means of low-level satisfaction of local demand for products which were out of the direct reach of industrious valley dwellers: small trading groups from further afield making their way along the desert wadi systems to provincial points of contact within the Nile valley. One tomb scene does not make a pattern, but it does point to a possibility which can only be denied by having recourse to the dogmatic statement: 'foreign trade was a royal monopoly', a statement which can be given no direct support. The availability of raw materials and imported finished goods in ancient Egypt is potentially a further subject of discussion as to where the balance lay from period to period between state and the private domain.

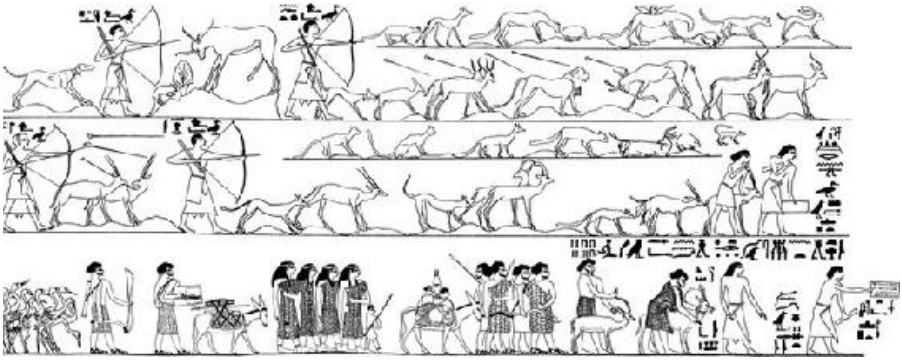


*Figure 7.5*Produce of the eastern desert received by the nobleman appointed to control it, the nomarch of the Oryx Nome and 'Overseer of the Eastern Deserts' in the Twelfth Dynasty, Khnumhetep. The produce is mainly in the form of hunted game, but also (*bottom register*) includes a Palestinian trading party (said to number 37 persons) bringing eye pigment, who are introduced by an Egyptian official, 'Chief huntsman, Khety', a title which illuminates the status of the Palestinian group in Egyptian eyes. From tomb no. 3 at Beni Hasan, after P.E. Newberry, *Beni Hasan* I, London, EEF, 1893, Pls XXX and XXXI.

Economics without money

The methods of small-scale economic transaction are well known for the New Kingdom, particularly from the wealth of data from the workmen's village of Deir el-Medina (Photograph 7.1).[29] Acquiring and disposing of goods was done by barter, but not just by an impulsive gesture of the kind: I'll swap you a pig for two pairs of sandals. Everything had a value, expressed in various units that coincided with quantities of certain commodities: weights of silver and bronze (often the *deben* and the *kite*), and units of capacity of grain and sesame oil (the *khar* and *oipe* for the former, the *hin* for the latter; Figure 7.6).[30] Metals were themselves used in exchanges but not as coinage. The nearest step on the road to money is to be found in the stone weights which, when used in the pans of scale balances, checked the weights and thus the values of metals, precious and otherwise. One group of the thieves of Thebes scrupulously kept in a house a stone weight which they had used in dividing up the spoil from one tomb (Papyrus B.M.10052, 3.8–13; cf. also 5.20). Prices varied from occasion to occasion, and the ratios of commodity values changed (e.g. that of silver to bronze declined late in the New Kingdom at Thebes from 1:100 to 1:60, perhaps because of the flood of silver from the spate of robberies). In a typical transaction, a

policeman buys an ox from a workman, and pays for it with a jar of fat worth 30 *deben*, two linen pieces worth 10 *deben*, scraps of bronze weighing (and thus worth) 5 *deben*, and 10 *hin* of vegetable oil worth 5 *deben*.[31] The total is 50 *deben* (of bronze), and the little receipt calls the total 'silver', which word was used colloquially to mean something very close to the modern word 'money'. This system of values also covered the price of labour and of raw materials. Stringing a wooden bed cost 1 *khar* of grain, actually making it cost about 5 *khar*, decorating it cost 1.5 *khar*, whilst the wood might cost 3 *deben*. With a *khar* of grain approximately equal to two *deben*, the total is about 18 *deben*. To buy a ready-made bed would cost between 12 and 25 *deben*, which is a rational reflection of the labour plus material costs.[32]

Photograph 7.1 The setting of village life: part of the village of necropolis workmen and artists at Deir el-Medina, western Thebes, late New Kingdom. The photograph has been taken facing towards the north-west, down the central line of one house, no. III.NE. More houses continue beyond a transverse road, and in the background are terraces which originally supported tomb chapels. The walls are partly restored.

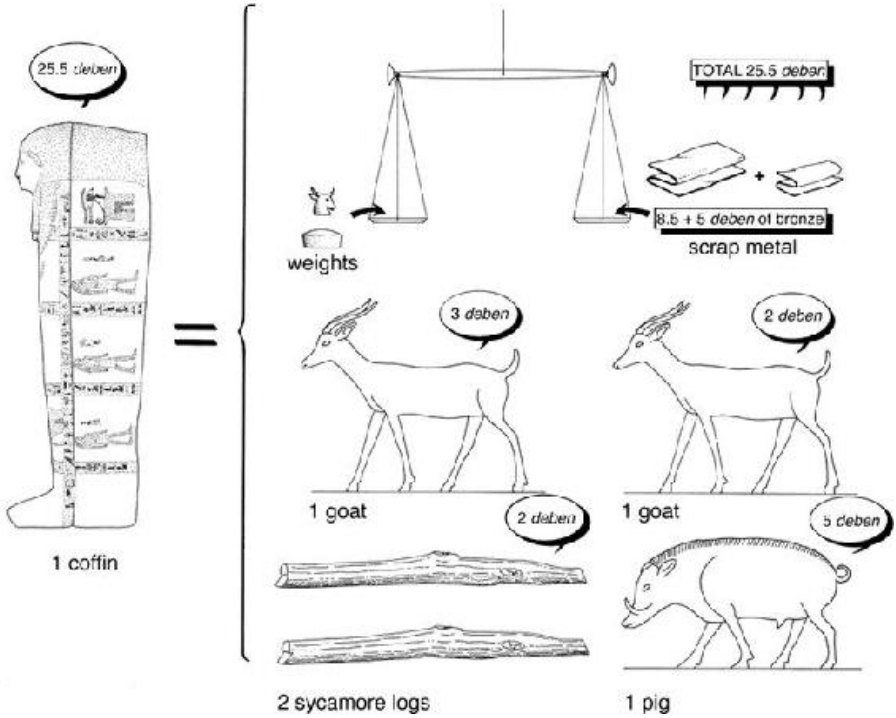


*Figure 7.6*Buying and selling by barter-exchange, illustrated by an example from Deir el-Medina, Twentieth Dynasty. On one side of the exchange is a coffin, notionally valued at 25.5 *deben* of bronze. The buyer has to make up a set of commodities of equal value, and does so partly with other items with notional values in bronze *deben* (two goats, a pig and two logs of wood, perhaps raw material for coffin making), and partly with actual bronze items or scraps where the *deben* value was obtained by direct weighing on scales (as in Figure 7.7, *above*, p. 313), using small stone or bronze weights sometimes carved in animal shapes. The example is from Ostracon Deir el-Medina 73, verso, from Janssen, *Commodity Prices*, 10.

Did the state play any role in the fixing of prices? We can be sure that it did not explicitly regulate them. There is no direct evidence for kings or other officials ever doing this, and the study of the prices themselves, although it throws up broad regularities, also reveals too many variations. Prices fixed themselves. However, from the very fact that, at least during periods of strong centralized administration, the institutions were heavily involved in paying wages and collecting, storing and releasing commodities held as buffer stocks, we can deduce that general levels were implicitly maintained. This is, however, a general framework within which all modern economic systems work no matter how active their ‘free’ market sector.

The fixing of prices for raw materials and other commodities, from grain to servant girls, takes us to the heart of the difficulties in coming to terms with ancient economies. It is tempting to draw a contrast

between how this might have been done in ancient times and what is regarded as the modern solution to fixing prices: by means of a free market in which the relationship between supply and demand does it automatically. This modern process seems to attract an unnecessary degree of mystique. The rise of consumerism has so vastly increased the number of transactions in society that they come to reflect arithmetic regularities, something further enhanced by the speed with which information is transmitted. In the street-market selling home-made jams, bankrupt stock and second-hand books, however, the abstract constructions and regularities of modern economics begin to dissolve. Although a rare second-hand book sold at auction can illustrate, through competitive bidding, a fixing of price by demand greatly exceeding supply, seemingly unimportant books are priced at what the seller thinks intuitively is a general value, but which in individual cases the buyer may regard as an amazing bargain, although other buyers might not agree.

The very personal concept of 'value' – do I think that something is worth a particular price? – provides an overall limitation on all marketing, the supply and demand relationship acting within it with an intensity that varies with circumstances. It is a relationship that basically reflects a general human preference for buying cheaply, coupled with thresholds of resistance against prices which seem to be high as measured against an intuitive appreciation of the 'value' of a thing. How values are formed is ultimately a psychological question outside the scope of economics altogether, which exists as a modern discipline only because, given sufficient examples of any phenomenon, statistical regularities are bound to occur.

When we consider ancient societies, since the volume of trading must have been much smaller and speed of communication much less than in modern times, statistical regularities which appear to be 'laws' in economics, if they existed at all, are bound to have lain within wide margins of variation. A more irregular and unpredictable pattern of prices is what one should expect if prices were freely fixed. Such a pattern is not evidence against marketing and exchange of goods by people motivated towards coming out of a deal with a sense of having done well, given that, if they know each other already, friendship or obligation may have tempered the vigour with which they pursued their deal.

The price data from ancient Egypt are more or less neutral as a source of evidence on how they themselves were fixed. Thus in the case of the price of a pair of sandals: over nearly 150 years they

remained within a range of 1 to 2 *deben*, occasionally 3.[33] It is likely that 'tradition' played a part here, people becoming accustomed over the years always to paying roughly the same amount. This does not, however, exclude an underlying rationale. We can also say that, lacking modern machinery for mass production, the price of a pair of sandals reflected a floor price of subsistence for the sandal-maker. Prices were held at this level by the resistance of the buyer, who, if faced with a high price, could hobble far enough away on his worn-out sandals to buy from another sandal-maker at the usual price. 'Tradition' might itself represent an equilibrium of supply and demand.

A particularly interesting set of prices is that for grain (wheat and barley), a commodity generally prone to volatile price movements and thus the object of huge intervention schemes in modern 'free-market' economies. Intervention in the form of massive storage capacity creating buffer stocks was standard in ancient Egypt, too, both at the institutional level and within the economies of private estates whether in times of peace and plenty (e.g. the Amarna estates, Figures 8.12 and 8.13, pp. 350 and 351) or in times of famine and unrest (e.g. the nomarch Ankhtify, p. 300). This was a passive intervention that did not extend to official attempts to regulate prices. The New Kingdom price data show many prices of between 1 and 2 *deben* per *khar*, which presumably reflected a fair return for all those involved in farming, although the margin of difference was no small one where large consignments of grain were involved. But the buyer's resistance threshold could be much lower, driven there by the prospect of hunger. In the economy of western Thebes in the late Twentieth Dynasty prices show great volatility, ranging from some near-normal to far higher levels, reaching, during the reigns of Rameses VII–IX, 8 and even 12 *deben*. This was not a case of general 'inflation' of the kind so familiar from the modern world, since other prices fail to display a similar trajectory, and there is no evidence for alterations in the units of measurement themselves. One clue is the famine reference quoted above: the woman who claimed to have sold barley for silver 'in the year of the hyena, when there was a famine'. Unfortunately, the source fails to say what quantities were involved, but the way that she phrases her statement implies that a barley/silver exchange made during that famine was a distinctive transaction, and a high price is the natural interpretation. Actual prices from around this time (the first part of the reign of Rameses XI) show a common doubling of the traditional maximum price, thus 1 *khar* is equal to 4 *deben*. We can

also look to the repeated complaints of food shortages by the Deir el-Medina community from the reign of Rameses III onwards to explain the fluctuations of the grain prices in later Ramesside times, though a cause-and-effect connection has to remain circumstantial.

The evidence we have been considering points inescapably to people being autonomous economic individuals; constrained within a system, of course, but none the less alert for opportunities. Another such person, living much earlier, towards the beginning of the Twelfth Dynasty, was Hekanakht, a farmer from probably the northern part of Middle Egypt.[34] Whilst away from home, probably performing duties at Thebes, he wrote letters back to his family. These display a strong urge to maximize family income by means of shrewd deals with neighbours and others, with no reference at all to an outside system or authority.

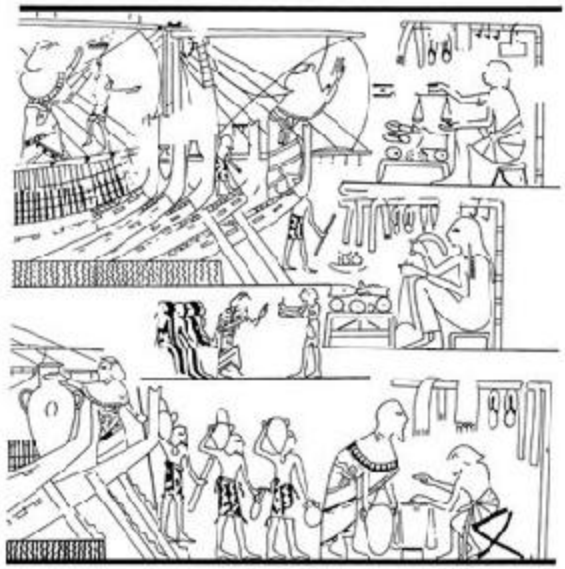
> He was able to pay rent for his lands in advance, could, in addition, lend substantial amounts of grain and had at his disposal copper, oil, and cloth woven from the flax raised on his farm, all of which could be used to make purchases. He cultivated more than was needed for the immediate requirements of his household, and had substantial capital reserves.[35]

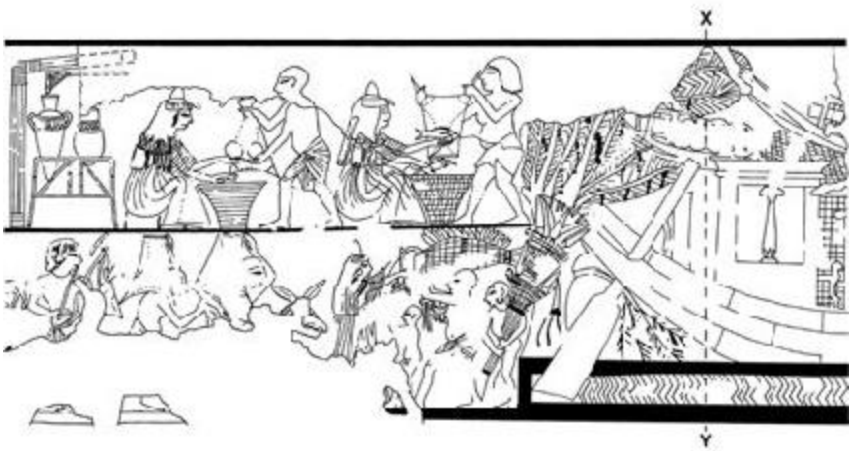
He also possessed a herd of 35 animals. Towards members of his household he displayed an obligation of a strict kind, issuing everyone including his mother with a monthly allowance, and so repeating on a tiny scale the precise system of ration distribution so familiar from administrative texts. But to the outside world the relationship was one of calculated gain. He displays the mentality of one who survives by shrewd personal dealing rather than of one whose fortunes depend upon his position within a system of social obligation and of administered support. He urges one of his household, for example, to retain one bull in a herd about to be sent out because a chance of a particularly good sale had arisen: 'his price has increased by half'.[36] His fortunes were, none the less, tied to the level of the Nile, so that a low inundation in one year considerably reduced his disposable income.

Egyptians like Hekanakht lived economics rather than thought it. Having no word that we can translate as 'profit' they could not strive for it as an abstract measure of success in trading or making things.

But this did not hinder them from distinguishing a good from a bad price, and should not hinder us from crediting them with an adequate business sense.

The Deir el-Medina records of transaction are devoid of locale, as are, in general, the confessions of the Theban thieves. Some transactions must have arisen because buyer and seller, in the same village, knew each other. This might apply when manufacturing was involved. If you wanted to obtain a new footstool you presumably knew where a carpenter lived, and the transaction took place at a house, either his or yours depending on your relative status. But would informal and personal contacts suffice entirely to match demand with supply? Were there markets in which sellers spread their wares in recognized marketplaces? One of the accused women in the robbery papyri sets a telling scene: 'Now I happened to be sitting hungry (begging?) under the sycomore-fig trees, and the men happened to be trading bronze as we were sitting hungry' (Papyrus B.M.10403, 3.5–7). Where the sycomore-fig trees were in terms of the topography of western Thebes we do not know. But some markets at Thebes are stated to have been on the river bank.[37] This we know also from tomb paintings. There are no texts to explain these pictures, no hieroglyphic comments filling spaces around the figures. Our understanding of them depends on correctly interpreting the mime that the artist has used to convey the meaning. One of them comes from the tomb of a Deir el-Medina sculptor named Ipy, who looked forward in the next world to the life of the scribal ideal (Figure 7.7, *Below*).[38] The centre of the scene is a river boat bringing the annual grain harvest to the private granary, as well as bundles of papyrus and what are probably bundles of fodder. As the unloading takes place some of the sacks of grain, as well as the green-stuff, are sold. The buyers are simultaneously sellers: women who sit with a single basket of produce in front of them. In return for grain they sell fish, loaves and vegetables. Behind a seller of bread a shelter has been erected shading two jars of drink. From one protrudes a right-angled drinking tube of metal, of the kind used for imbibing beer (a preserved example includes a filter at the lower end).[39] The logic of the picture is that this also is a saleable commodity, though in the form of not a complete jar of beer but a measured amount to be sucked out. The scene complements well the testimony of some of the robbery papyri: the role taken by many women in buying and selling for the household, including cash crops.

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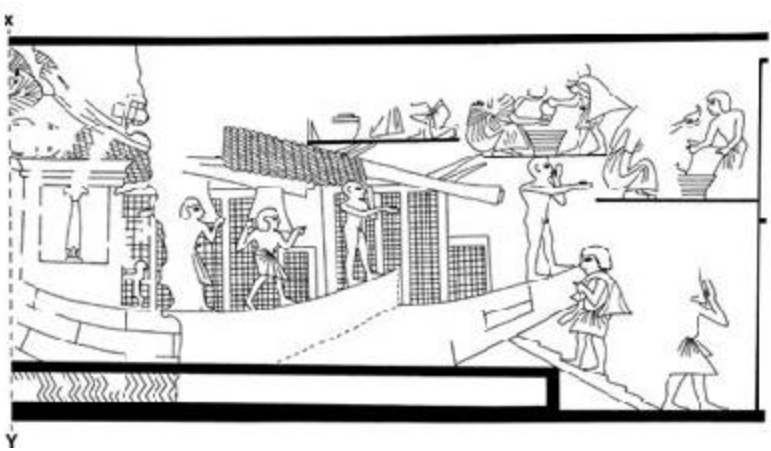

X
Y

*Figure 7.7*Scenes of barter-exchange in New Kingdom tombs. *Above*. Traders in booths make deals with Syrians unloading their wares at the river bank, from the tomb of Kenamun (no. 162 at Thebes), after N. de G. Davies and R.O. Faulkner, *JEA* 33 (1947), Pl. VIII. *Below*. Workers unloading a grain barge use sacks of grain to buy fish and vegetables from village women, from the tomb of Ipy (no. 217 at Thebes), after Davies, *Two Ramesside Tombs*, Pl. XXX.

The second scene, although similar in design, depicts transactions at a significantly different level. It comes from the tomb of Kenamun, an Eighteenth Dynasty mayor of Thebes who was also in charge of the granaries of Karnak temple (Figure 7.7, *Above*).[40] The subject is the arrival at Thebes of a fleet of sea-going ships from Syria and the Aegean. They unload their cargo and, in a further portion of the scene, present their goods to Kenamun himself. Herein lies the first ambiguity. Is Kenamun, who as mayor would have been a leading and wealthy citizen, receiving the goods for himself, acting out the line in the school text where the scribe's ship 'has returned from Syria laden with all manner of good things'?[41] Or is he receiving goods destined for, say, the temple treasuries? As with Ipy's painting, *en route* to their destination some of the goods are sold, presumably on the river bank. The buyers are, inevitably, sellers also, but no longer women with a single basket of foodstuff. Two of the three traders are men, and all three sit beneath shelters, offering a range of goods: sandals, lengths of cloth (some with fringes), bread and other food, and what may be bronze fish hooks. One transaction is shown: a Syrian proffers a stoppered jar (is it of wine or incense or another of the commodities which travelled in these ubiquitous amphorae?). The male traders hold little scale balances in their hands. These are occasionally found in excavation.[42] One (perhaps their main) purpose was to weigh metal against stone weights of known values on the *deben* scale. The implication of their appearance in this scene is that metals were part of the transaction, with the foreigners perhaps carrying their own sets of weights as a safeguard against being cheated. The Egyptian traders look much more professional than the women in the tomb of Ipy. But who were they really? This is a crucial area of ambiguity. Were they 'traders' as the Egyptians used the word, that is, commercial agents for officials? Or were they trading for themselves? If we knew the answer, we would have an important piece of knowledge for the Egyptian economy of the period. For in the latter case they would have been, in effect, shopkeepers, living from buying and selling and thus from the profit between transactions. But even without this knowledge we must admit that these scenes do not illustrate *ad hoc* exchanges between

neighbours in a village. They display the kind of purposeful behaviour on the part of the sellers which belongs to proper markets in which buyers are not necessarily from the same community at all, and thus not necessarily much influenced by social obligation: the very kind of mechanism that is required for an economic model which allows greater scope to private enterprise.

These New Kingdom scenes have a long history behind them, with important predecessors in several Old Kingdom tombs.[43] Like their later counterparts, however, they are to be explained as much from how we perceive the general economic framework as from any specific details within the scenes themselves, which remain, on their own, ambiguous. There is one social change to notice: in the Old Kingdom scenes, the sellers are normally men. There is also one unusually explicit accompanying text: in a sale of cloth the statement is made: 'xx cubits of cloth in exchange for 6 *shat*'. Although the exact nature of the *shat* at this time is not known, it must be a unit of absolute value similar to the New Kingdom units of bronze, grain, oil and so on.[44]

Deir el-Medina, the source for so much of our evidence about economic life and much else in ancient Egypt, was an atypical community, in two respects. Though a small village it was in contact with senior officials and wealthy clients and thus with affluent living, which rubbed off on the villagers' own expectations; and its basic needs were supplied as rations by the state. This latter circumstance, however, only adds interest to the evidence for private enterprise on the part of the villagers: exchanging goods with each other and with outsiders, manufacturing beds, selling their specific skills as artists in the making of statues and coffins, hiring or lending donkeys for exorbitant interest or rental, and generally directing part of their lives towards accumulating wealth, part of which ended up in their well-appointed burials. The villagers show in their lives that the state, even when in the position of supplier of needs, could do so only in a rough-and-ready way, through regular grain rations and a few other perks, leaving the detail of individual demand to local and private transactions, in other words to a market. An example of where the boundary lay between public and private provision is the water supply for the village, which had no nearby natural source of its own (although an attempt, possibly unsuccessful, was finally made to dig a well not far from the village). A group of water-carriers was provided for the village. It was feasible for a man to carry water in a pottery amphora either on his shoulder or slung on a pole (tomb scenes depict

both), but easier to use a donkey. So the water-carriers, who were poor men, regularly hired donkeys from the Deir el-Medina workmen themselves.[45]

The inhabitants of Deir el-Medina were limited in means, status and ambition, and no amount of evidence from here can fully describe the Egyptian economy. The crucial area of contact between state system and private need was the lives of officials, the group most exposed to competitive pressures. Although in receipt of rations and other rewards from the state, the households of these people were often organized, so it would seem, to bring in an income well in excess of subsistence. What did they do with the excess, men and women who were too busy or proud to haggle over the price of a donkey with a ragged neighbour, but who nevertheless had wealth stored in plenty in and around their houses? The answer is provided by a class of persons already encountered, tied up in dealings with the robbers of western Thebes. They are the men with the title *shuty*, a word best translated as 'trader'.[46] They appear always in the employ of someone else, either a temple or an official, and must have been commercial agents, to whom was delegated the job of buying what was needed in exchange for accumulated wealth. The employer overlap between temple and private household is itself revealing as to the essentially common nature of the economic basis of both. Both accumulated farm produce and manufactured goods (with linen cloth prominent in the case of households) from regular income but were not wholly self-sufficient and needed to purchase from suppliers of one kind or another. In the robbery papyrus referred to earlier (Papyrus B.M.10068, Recto 4.1–18) gold and silver had been recovered from 14 'traders of every establishment'. No fewer than seven of them (two of them brothers) belonged to the household of a high-ranking soldier, a chief of Hittite troops called Amen-nefer; two belonged to the daughter of another officer, a woman called Isis who was also a temple singer; two more belonged each to military officers; and the remaining three belonged to temples, and were responsible to a named priest.[47] Elsewhere in this group of papyri a group of eight traders appears from the town of Mer-wer, at the entrance to the Fayum. This was where one of the principal harim-palaces for royal women was situated (at the archaeological site of Medinet el-Ghurab), and this could have provided a suitably safe outlet for stolen treasure.

The status of traders varied. They could be rich enough to own their own slave, or poor enough to be at the same time a slave to their employer. Their contacts enabled them to do business for themselves

on the side: not only receiving stolen goods but also, in a satirical school text, lending grain to the poor peasant who is unable to discharge his debt even by offering his wife to them.[48] The picture that is painted by a variety of texts is that the 'trader' – the commercial agent, the arranger of deals – was a ubiquitous figure of New Kingdom Egypt. To find the right markets they plied the Nile in boats: 'The traders fare downstream and upstream, as busy as bees (lit. copper) carrying goods from town to town, and supplying wants.'[49] Their journeys took them abroad. 'Your ship has returned from Syria laden with all manner of good things,' says a model text in which the writer daydreams about the good life of the successful official.[50] This long-distance aspect to trading emphasizes the point made in connection with the tomb scenes of marketing: there can have been little if any sense of social obligation between trader and customer.

Internal mobility provides, in fact, a weighty argument against the view that personal economic transactions were so often cosy reciprocal exchanges between relations and neighbours as to form the only serious alternative to redistribution. Two aspects are particularly telling. One was the provincial origin (and continuing links) of some officials who based themselves in a royal city. When the mayor Menthuhetep moved into his new house at Thebes (p. 302), built on land purchased from a stranger, those with whom he came to do business would not have belonged to his own social nexus, and there would have been fewer grounds for the idea of 'reciprocation' to skew prices demanded and prices paid (although this might have developed in time). The other was the well-documented long-distance internal trading initiated by large institutions and conducted through their 'traders'. The implication of a range of sources is that internal riverine movement of goods was a major factor in the life and economy of Egypt, probably at times overshadowing the local movement of produce at village level. The fact of 'internal cosmopolitanism' invalidates too great a reliance on case studies of modern peasant communities to provide the social and economic models for ancient Egypt. To do so is to accept too parochial a horizon and to ignore the power of the River Nile, not only to sustain life, but also to provide a channel of communication.

The status of the trader was a lowly one. Few who bore it were able to leave a permanent memorial to themselves and then only something very modest.[51] For this reason we should not translate it as 'merchant'. It is here that the ancient and modern worlds divide on economics. Trading was akin in status to making sandals. Rich people

enjoyed the benefits of trading but did not pursue it as an occupation, whilst the idea that the activity could bring wealth and position on its own terms was unthinkable to all concerned. There were no merchant princes just as there were no princes of sandal-makers. Officials – 'scribes' – maintained the monopoly of power, prestige and wealth. It was not a conspiracy but part of the natural order.[52]

The economic system of ancient Egypt is tolerably clear, if we allow logic to create the framework in which textual and archaeological evidence can be set. The beginning of understanding is an acceptance that ancient Egypt was, by the standards of the ancient world, a rich country. In stable times it had wealth in plenty stored and in circulation, offering to all the prospect or the dream of a life far above subsistence level. This created the phenomenon of private demand: powerful and widely spread from the late Predynastic Period onwards. When the state was strong and well organized many people gained much from its redistributive mechanisms, which must, in these same times, have acted as a general control over the whole economy simply on account of their magnitude. But for those demands which could not be met by state hand-outs (and this would amount to virtually everything in times of weak government) recourse to markets provided the answer: both local face-to-face dealings sometimes skewed by social obligation, and wider-ranging exchanges involving employed intermediaries – 'traders'. Social values obscured the reality of the process, leaving a blind spot over the concept of profit. But any ancient Egyptian who could feel the difference between a good price and a bad price was a representative of 'economic man'.

Within the framework of macroeconomics, which embraces all states that have ever existed, a common goal of research is to identify the ways in which the two forces – institutional and private – satisfied their interests, both in terms of the means employed and the disguises in which they were clad. It is also misleading to view ancient economies as a stage in an evolutionary process. For there is sufficient variety of economic system in the modern world to make the choice of evolutionary line an arbitrary one. Rather they should be seen as further variations of a single theme, different solutions to a common problem: how do large communities, inevitably made up of competing interests, remain in existence for long?

There is an interesting twist to this question, which can help us to understand the resilience of ancient Egypt, its capacity to rebuild itself into a successful prosperous country after the reverses of civil war or invasion. Money in the modern world is not directly tied to specific

commodities but is based in part upon faith. It mostly circulates endlessly, and the amounts increase as the years pass, although to some extent this is countered by depreciation in value. In the course of circulation, it tends to gravitate towards the more successful economies (which pay higher interest), exacerbating the gap between the richer and the poorer. Part of ancient Egypt's wealth took the form of metals (gold, silver and bronze), just as is the case with modern states, whose gold reserves are one measure of economic health. Another and important part took the form of perishable commodities (primarily grain). Where the Egyptian economy was so different from ours was in the use (though not exclusively) of grain and other items as a major part of personal and institutional wealth and as a means of exchange. Perishable commodities have a short life. They cannot be banked for long and become savings. They cannot earn interest or be directed elsewhere as investments, but must be put into circulation after which they will vanish. They have storage costs, and the effort required to transport them for any distance encourages local consumption. People in ancient Egypt were indeed 'consumers' in a very literal way. If one adds to this the huge social prestige of having land to work and overflowing granaries, it was hard to be a miser. The rich individual and the rich institution were obliged by necessity and by social convention to spend locally, and in so doing to support the local community.

The system was not designed to do this out of altruism. It was a happy consequence because no serious alternative had yet been developed. It could have been a key factor in the success of the ancient Egyptian way of life, one of the marked characteristics of which was how the provincial regions continued to thrive. They were not impoverished at the expense of an over-large capital city. Local institutions – the nomarchs and their estates and later the large temples – were centres of commodity production, storage and consumption. The difficulties of getting a significant portion of this to flow out of the region are likely to have encouraged local prosperity.

In the face of modern capitalism's tendency to create huge inequalities and to suffer chronic instabilities a radical view has been advanced which advocates a return to a somewhat artificial version of the ancient economic style which is intended to bring greater stability to the international currency system and to give better support to local communities.[53] It draws upon a history of modern local experiments, often done in times of crisis, in creating local currencies tied to local goods and services which are designed to be spent rapidly and locally

because they depreciate in value steadily, by having negative interest applied to them. Misers become losers. The proposal envisages the creation of a global reference currency tied to a standard basket of commodities and services selected because they are particularly important for international trade. As an example, one unit might equal one-tenth of a barrel of oil, one bushel of wheat, two pounds of copper or one-hundredth of an ounce of gold. The costs of storage would be borne directly by the currency as a sustainability or negative-interest fee, to discourage hoarding. Whether or not such ideas have a future on a significant scale, they possess a power to clarify. For the ancient Egyptian economy is actually an example of such a system at work, providing historical depth for the concept. By variations on it much of the world survived and developed for thousands of years.

Notes

1An important influence has been that of the economic historian Karl Polanyi; see Warburton, *State and Economy*; Zingarelli, *Trade*, 23–30. S. Quirke, *ZÄS* 118 (1991), 141–9 discusses the issues in terms of the more impenetrable society of the Middle Kingdom. See also Muhs, *Economy*, 1–12 for a somewhat different perspective on what the study of the ancient Egyptian economy should be about. The study by D. Warburton, *JESHO*, 43 (2000), 65–131, entitled 'Before the IMF: the economic implications of unintentional structural adjustment in ancient Egypt', should be required reading. Park and Greenberg, *Finance* places the ancient Egyptian economy alongside those of ancient Mesopotamia, classical Greece and Rome, early Judaeo-Christian finance and Islamic finances of the eastern Mediterranean as forming the 'roots of western finance'.

2Hence the title of a textbook published by Cambridge University Press in 2010 (by Roger E. Backhouse, Professor of the History and Philosophy of Economics), *The Puzzle of Modern Economics: Science or Ideology?* Alfred Marshall's quote is given on p. 100. David Graeber (an anthropologist), in *Debt: the First 5,000 Years*, 2nd edn, Brooklyn, NY, Melville House (2014), exposes the shaky foundations of economists' understanding of how pre-modern economies worked. I thank Dave Devereux for lending me this book.

3Kruchten, *Horemheb*; Murnane, *Texts*, 235–40. It has also been pointed out that 'The Duties of the Vizier' text known from several New Kingdom tombs, whilst it has an internal logic of association which enables it to achieve its purpose of profiling the importance of the vizier, lacks the systematic presentation of the vizier's duties that we ourselves tend to expect of such a text. See G.P.G.van den Boorn, *Orientalia* N.S. 51 (1982), 369–81.

4As illustrated in, for example, the autobiography of Weni, Lichtheim, *Literature* I, 21; and a decree of the time of Tutankhamun, Murnane, *Texts*, 215–16.

5Davies, *Rekh-mi-rē*ʾ, 32–6, 103–6, Pls XXIX–XXXV.

6F. Ll. Griffith, *JEA* 13 (1927), 193–206; Davies, *Historical Inscriptions*, 277–308; Kitchen, *Ramesside Inscriptions* I, 45–58; Kitchen, *Ramesside Inscriptions (Trans)* I, 38–50; Muhs, *Economy*, 96–8, 108–9, 135.

7Davies, *Historical Inscriptions*, 30; Kitchen, *Ramesside Inscriptions* I, 56.12–57.2; Kitchen, *Ramesside Inscriptions (Trans)* I, 48–9.

8Karnak: Kitchen, *Ramesside Inscriptions* IV, 263–6, no. 18; Kitchen, *Ramesside*

Inscriptions (Trans) IV, 188–9; Elephantine: *JEA* 13 (1927), 207–8; Kitchen, *Ramesside Inscriptions* V, 343–5, no. 138; Kitchen, *Ramesside Inscriptions (Trans)* V, 291–3; Armant: Mond and Myers, *Temples of Armant*, 161; Kitchen, *Ramesside Inscriptions* II, 712–3, no. 261D; Kitchen, *Ramesside Inscriptions (Trans)* II, 469; Hermopolis: *MDIAAK* 8 (1939), 161–4; Kitchen, *Ramesside Inscriptions* I, 125–6, no. 67; Kitchen, *Ramesside Inscriptions (Trans)* I, 106; Kanais (Wadi Mia): Schott, *Kanais*, 123–89; Kitchen, *Ramesside Inscriptions* I, 67–70, no. 32C; Kitchen, *Ramesside Inscriptions (Trans)* I, 58–60; Muhs, *Economy*, 96–7.

9 Papazian, *Domain*, 101–18.

10 For example Caminos, *Miscellanies*, 17–20, 273–5, 280–93, 325–8, 454–64.

11 Beni Hasan: J. Garstang, *The Burial Customs of Ancient Egypt*, London, Constable, 1907, esp. Pls III, IV; Naga ed-Deir: G.A. Reisner, *A Provincial Cemetery of the Pyramid Age: Naga-ed-Der*, Part III, Oxford, OUP and Berkeley, CA, UCP, 1932; D.B. O'Connor, *World Archaeology* 6 (1974), 22–3.

12 Serious political intrigue amongst these locally powerful men is hinted at in the Sixth Dynasty letter from Elephantine published by P. Smither, *JEA* 28 (1942), 16–19; Wente, *Letters*, 58; Strudwick, *Texts*, 178–9.

13 For Ankhtify see J. Vandier, *Mo'alla: la tombe d'Ankhtifi et la tombe de Sébekhotep*, Cairo, IFAO, 1950; W. Schenkel, *Memphis, Herakleopolis, Theben*, Wiesbaden, Harrassowitz, 1965, 45–57. Similar claims by other men of the time are conveniently translated in Lichtheim, *Literature* I, 87–90.

14 For the expansion of towns at this time see Moeller, *Urbanism*, 219–46. Although we have no remains of the town of Nefrusi in Middle Egypt to go with it, the huge private tomb of an unnamed local ruler at nearby Dara is suggestive of a moment of great local power, see Kemp, *Anatomy*^{2}, 338, Fig. 116.

15 Brunton, *Qau* I, II; Brunton, *Mostagedda*; G. Brunton, *Matmar*, London, Quaritch, 1948; D.B. O'Connor, *World Archaeology* 6 (1974), 24–7; J.S. Seidlmayer, *Gräberfelder aus dem Übergang vom Alten zum Mittleren Reich: Studien zur Archäologie der Ersten Zwischenzeit*, Heidelberg, Heidelberger Orientverlag, 1990.

16 Brunton, *Qau* I, 76.

17 Eyre, 'Work in the Old Kingdom', 20–5. He cites a case where the king provided a complete burial for a favourite dog. The written evidence for the New Kingdom is less (Eyre, 'Work in the New Kingdom', 198–9), although Akhenaten, on his Boundary Stelae, promised to provide tombs for some of his court in the 'eastern mountain of Akhetaten', Murnane, *Texts*, 78.

18 J.J. Janssen and P.W. Pestman, *JESHO* 11 (1968), 137–70; Muhs, *Economy*, 101–2.

19 Caminos, *Miscellanies*.

20 P. B.M.10102: S.R.K. Glanville, *JEA* 14 (1928), 294–312; James, *Pharaoh's People*, 172–5; Wente, *Letters*, 90–2.

21 Lichtheim, *Literature* I, 60.

22 Peet, *Tomb-robberies*; Vernus, *Affairs, passim*; and Zingarelli, *Trade*, 64–6 also quote from these papyri. All of the ensuing quotations, unless given separate references, are from Peet's volume.

23 Frankfort and Pendlebury, *COA* II, 59–61, Pl. XLIII. For the Hittite figurine, and a discussion of the circumstances of the find and its significance, see M. Bell, *AJA* 90 (1986), 145–51.

24 James, *Pharaoh's People*, 186, and Pl. 11 (top).

25 Wente, *Letters*, 146, no. 196.

26 I. Shaw, *Hatnub: Quarrying Travertine in Ancient Egypt*, London, EES, 2010.

27 Nicholson and Shaw, *Materials*, 121–47. See also the suggestive diagram of the sources of raw materials needed for the basic Egyptian industry of faience manufacture in A.J. Shortland, *Vitreous Materials at Amarna: the Production of Glass and Faience in 18th Dynasty Egypt*, Oxford, Archaeopress, 2000, 145, fig. 5.15. Powdered gypsum, widely used as plaster and as a cement, is now known to have been dug from shallow surface deposits easily accessible from the Nile valley, J.A. Harrell, *JAS: Reports* 11 (2017), 536–45; http://dx.doi.org/10.1016/j.jasrep.2016.12.031.

28 S.H. Aufrère, 'The deserts and the Fifteenth and Sixteenth Upper Egyptian nomes during the Middle Kingdom.' In Friedman, *Egypt and Nubia*, 207–14.

29 Janssen, *Commodity Prices*; James, *Pharaoh's People*, Ch. 9; Eyre, 'Work in the New Kingdom', 168–80; Zingarelli, *Trade*, 53–64; Muhs, *Economy*, 120–3, 137–40.

30 The word 'copper' is often used to refer to the commonest metal in use at the time although many analyses show that it was normally an alloy approximating to bronze. I have used the term 'bronze' here, although 'copper alloy' would be more correct.

31 Janssen, *Commodity Prices*, 9.

32 Janssen, *Commodity Prices*, 180–4.

33 Janssen, *Commodity Prices*, 292–8.

34 Allen, *Heqanakht*; T.G.H. James, *The Hekanakhte Papers and other early Middle Kingdom Documents*, New York, MMA, 1962; K. Baer, *JAOS* 83 (1963), 1–19; James, *Pharaoh's People*, 113–14, 242–7; Wente, *Letters*, 58–63; Parkinson, *Voices*, 101–7; Ray, *Reflections*, 23–39. For a general approach see C.J. Eyre, *JESHO* 40 (1997), 367–90; Muhs, *Economy*, 76–7, 84–5, 89–90.

35 K. Baer, *JAOS* 83 (1963), 12; see also Allen, *Heqanakht*, 170–1, who points out that one year of poor harvest had left Hekanakht with 'ample assets coupled with a shortage of cash'.

36 Document V, 25–9; K. Baer, *JAOS* 83 (1963), 19. Allen, *Heqanakht*, 19, 55 translates differently, the comment being in response to a third person's complaint about possible loss of a bull, that if this happens 'half of its price is on him and (half on) Heti's son Nakht'.

37 Deir el-Medina texts frequently refer to the 'river bank' (*mryt*) of western Thebes as a place where trading and other activities took place. Černy, *Community*, 94–7 supplies the basic references; also R. Ventura, *Living in a City of the Dead: a Selection of Topographical and Administrative Terms in the Documents of the Theban Necropolis*, Freiburg and Göttingen, *V&R*, 1986, 79–82; McDowell, *Jurisdiction*, 220–2; Zingarelli, *Trade*, 44–50.

38 Davies, *Two Ramesside Tombs*, Pl. XXX; James, *Pharaoh's People*, 250–2, Fig. 25; Zingarelli, *Trade*, 36–9.

39 Freed, *Pharaohs of the Sun*, 239, no. 115.

40 N. de G. Davies and R.O. Faulkner, *JEA* 33 (1947), 40–6; James, *Pharaoh's People*, 253–6, Fig. 26; Zingarelli, *Trade*, 37–9.

41 P. Anastasi IV, 3.10–3.11: Caminos, *Miscellanies*, 137–8; see also note 50.

42 Freed, *Pharaohs of the Sun*, 252, no. 160.

43 A. Moussa and H. Altenmüller, *Das Grab des Nianchchnum und Chnumhotep*, Mainz, von Zabern, 1977, 84–5, Taf. 24, Abb. 10; James, *Pharaoh's People*, 254–8, Fig. 27; Eyre, 'Work in the Old Kingdom', 31–2; Zingarelli, *Trade*, 34–7; Muhs, *Economy*, 46–7; Strudwick, *Texts*, 409–10.

44 Muhs, *Economy*, 37.

45 J.J. Janssen, *Donkeys at Deir el-Medîna*, Leiden, NINO, 2005.

46 Janssen, *Ship's Logs*, 101–4; James, *Pharaoh's People*, 247–8; Zingarelli, *Trade*,

71–81.

47 Vernus, *Affairs*, 47–8, where the translation ‘broker’ rather than ‘trader’ is used.

48 P. Lansing 6.9–7.1 = Caminos, *Miscellanies*, 390; see also Janssen, *Ship’s Logs*, 103.

49 P. Lansing, 4.8–4.9 = Caminos, *Miscellanies*, 384.

50 P. Anastasi IV, 3.10–3.11 = Caminos, *Miscellanies*, 137–8; also the trader returning from Syria in ibid., 16 = P. Bologna 1094, 5.5–5.6.

51 An example is a stela from Saqqara (presumably the owner had lived at Memphis) which commemorated a man named Huy, who was ‘the chief of traders of the Mansion of the Aten’: *Urk*. IV, 2022.11–17; Murnane, *Texts*, 51–2, no. 24.

52 The sculptor who made the famous bust of Nefertiti (his identity probably ‘the chief of works and sculptor, Thutmose’) lived in and worked from a housing complex that belonged to the upper echelon of Amarna society. His success presumably came from royal patronage. A ‘chief of weavers’ belonging to the Ramesseum, named Nefer-renpet, was owner of a small painted tomb at western Thebes, N. de G. Davies, *Seven Private Tombs at Ḳurneh*, London, EES, 1948, 49–50, Pl. XXXV. He, however, was an official of a major temple.

53 B. Lietaer, *The Future of Money: a New Way to Create Wealth, Work, and a Wiser World*, London, Random House, 2001. One inspiration is the writings of Silvio Gessell (1862–1930) on whom even J.M. Keynes looked with favour (pp. 252–3).

8

Egypt in microcosm: the city of Amarna

The founder: Akhenaten, 'the heretic king'

The human mind is generally a marvel of accommodation, compromise and scepticism. These characteristics enable people to live in communities. In a few individuals, however, this moderating psychological cushion is held in check and overridden by a passionate and uncontrollable fixation which tells them that the inventions of their minds are truths that others must accept. Most of these individuals pass through their lives unheeded. But in Akhenaten we have such a person in a position of great power – a king who seems to have rejected the principal field of speculative knowledge built up over centuries and, in its place, to have promoted the recognition of a single creator god, the Aten, visible as the disc or the orb of the sun.[1] By what agitation of mind Akhenaten came to step outside the perspective of his time he nowhere makes explicit, although we can recognize the likelihood of a sudden acceptance of an idea, spontaneously generated or picked up from others, which he could not resist. Yet although he appears at first to be an uncompromising figure, the closer one looks the more one can see that his foray into absolutism in ideas was compromised by a level of inconsistency which seems greater by comparison with equivalent figures from later periods of history.

Egyptian thinking on the hidden aspects of the world offered a path of understanding, or rather a network of paths, sometimes branching, sometimes running in parallel and constantly tempting the imaginative thinker towards new cross-linkages. It was an open system of speculation. It allowed people to make their own connections. In a time before authoritarianism in knowledge had appeared (when false knowledge could be identified and condemned, and holding it bring persecution and death), it was open to change. The main, perhaps only, instrument of change lay in the work of serious-minded men who read and copied old texts, sometimes adding

explanatory glosses, and who from time to time felt stimulated to compose fresh material. Their ideas arose not through ecstatic visions but, so it seems, within a normal working, scholarly atmosphere. They drew upon a large store of traditional images concerning the world of the gods. When new variants spontaneously emerged in their minds they accepted them as knowledge to be preserved and respected, and to be incorporated into the stock of themes by which their knowledge was ordered. The result was a body of 'books', written on rolls of papyrus, which explored the otherwise hidden workings of the cosmos. One of them, the 'Coming forth by Day', we know more commonly as the Book of the Dead. The contents of these books, which are partly pictorial, provided the source material for areas of painted decoration inside the tombs of the Valley of the Kings (Figure 2.16, *Above*, p. 92, is an example). One aim was to allow the king, in an afterlife, to participate in the triumphant voyage of the sun god through the dangerous regions of the Otherworld. In their day they stood at the peak of serious knowledge. Now, more that 3,000 years later, they well justify the term 'weird knowledge' which I used in the Introduction (p. 5), not least because the details defy rational explanation, although explanations based on intuition and the imagination of the modern commentator are not uncommon. Those who composed them saw the potential for further development; we cannot follow them because the 'rules' are lost.[2]

The names of those responsible for maintaining and adding to this stock of knowledge are not easy to identify. This was the proper work of men attached to temples. Educated Egyptians were, on the whole, more impressed with people who offered sensible advice on conduct and morals, or who were particularly noted for practical achievements. The way to fame and to becoming a household name generations later was to write an 'instruction', which had little to say on the world of the gods but provided a message that people generally could understand, or at least find arresting. In the New Kingdom, the Egyptians still lived in so secure and confident a world of the mind that speculation on the hidden forces that kept the universe running was left to scholars following a path of free-thinking which always produced acceptable answers because of their innate respect for their own traditions. Respectful evolution was the process by which change occurred. Something might be new, but it was just what the ancestors would have approved of.

The fruits of their labours probably went over most people's heads, although, in the course of their lives, many Egyptians (at least from

the New Kingdom onwards) would have acquired a copy of at least one text that was a guide to the hidden dimension, the Book of the Dead. It is a text without narrative form, though with illustrations. Through a series of unconnected sections – 'utterances' – it provided the reader with statements of knowledge, the essence of which was contained in names: of animate beings (gods) and of objects which accompanied them (e.g. the parts of their boats). Knowing the names gave the reader power, and so the text was a means of personal empowerment over a realm which, although it could be accessed only through the imagination, underpinned the world of visual reality and daily experience.

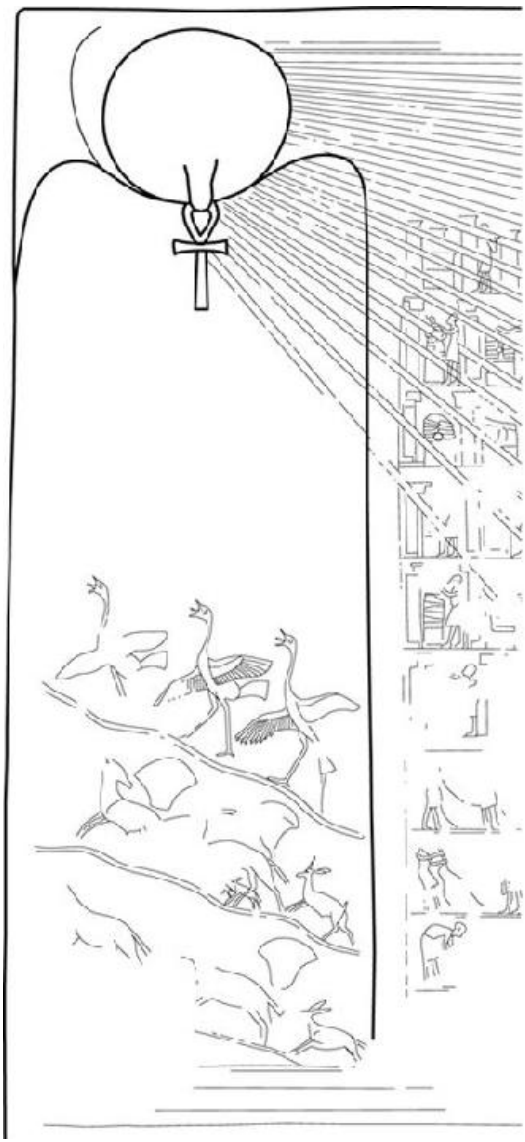
The Book of the Dead did not preach. The centre of authority was not an external voice but the reader's own, with his authority coming from the act of reading. The text embraced personal morality, but it was presented from the viewpoint of the reader who clears the way for a positive outcome of judgement after death by making his denials of bad conduct a statement of knowledge in itself. The emotional content seems to have been on a par with that of a modern textbook, although the nature of its knowledge was very different. The Book of the Dead was available for purchase or could be commissioned, the price reflecting the care that was bestowed on preparing it. It is hard to think that owners would not have read it and so become acquainted with what, to the Egyptians, was knowledge that was essential to a full existence, now and for eternity.

The Book of the Dead illustrates a fascination with names, of beings and of things. The same is true for a composition which appears on the walls of some of the tombs in the Valley of the Kings. Known as the Litany of Ra it invokes the sun god Ra under his 75 names, which are those of other gods.[3] Thus he is the 'body' (the ultimate reality) of Atum, Shu, Tefnut, Geb and Nut – the deities who are the main elements of nature. In this developed form of word-game, involving the handling of the names of gods as units of knowledge, a balance and harmony of thought were sought in which the potential incompatibility of the historical multiplicity of divinities on the one hand, and the perceived unity of divine power on the other, was avoided. The idea of many gods was held within a mental shell of ultimate unity, whose essence was the power of the sun. Whatever it was that Akhenaten stood for was rapidly rejected after his death and he seems to have been widely regarded as a villain. But rejection did not extend to the Aten. A text in the Ramesseum, Rameses II's mortuary temple at western Thebes (Figure 6.6, p. 259) and carved

about a century after Akhenaten's death, records that offerings are to be made to the sun god, Ra-Horus-of-the-Horizon (Ra-Horakhty).[4] But here Ra-Horakhty is not a single 'god'. He has component parts, to a total of 38, each of which is entitled to subdivisions of the offerings. These parts are a mixture of tangible things, such as the 'eastern desert' and 'the western desert', and elements identified through abstract thinking, such as the creator god Atum and 'Hathor at the prow of the barque of Ra'. A sequence of six names amongst the group gives us: 'Ra – his disc (Aten) – his body – his hand – the twin horizons – Maat in the barque of Ra'. Here we see the Aten's nature in conventional thinking, one element amongst several of the sun god. Of such is the universe composed: not of atoms (as the Epicurians later came to suppose) but of elements (mostly imagined), each with a name, to whom (or to which) deference in the form of offerings is due. If we draw a distinction between philosophy/science on the one hand and religion on the other, we arbitrarily separate a continuous process of human striving towards understanding which has, at different times and amongst different cultures, identified any number of variations of what the constituent parts of the universe are, sometimes gods, sometimes not. In Akhenaten we have a rare example from pre-classical antiquity of a named individual creating an interpretation of his own.

Of the 'gods' of the Ramesseum list, only the sun (the Aten) and a few parts of the landscape (the horizon and the deserts) belong to the 'real', external world. Akhenaten promoted the Aten, so we must suppose, because it was the only demonstrable manifestation of transcendental power. Its image was a disk (sometimes carved in such deep relief as to suggest a sphere) from which many rays descended, each one ending in a hand (Figure 8.1). This aspect symbolized the animating power that descended in the form of sunlight. Yet he could not wholly discard the mental habit of buttressing a single name with alternatives. Like a king, the Aten was given a name written in a pair of cartouches, the wording of which was changed part of the way through his reign (of 17 years). The first version translates as: 'The living-one, Ra-Horus of the Horizon (Ra-Horakhty), who rejoices on the horizon, in his name of "Shu who is the Aten"'. Shu was the name given to the element of the sunlit atmosphere. The revised version translates (with slight uncertainty) as: 'The living-one, Ra, ruler of the two horizons, who rejoices on the horizon, in his name of sunlight that comes from the Aten' (or possibly 'Ra the father who has come as the Aten'). The repeated emphasis on the word 'horizon' is notable,

the two horizons (east and west) being amongst the elements of which the sun god was composed. The change in writing the word ‘sunlight’ involved dropping the proper name Shu. Both versions of the cartouches seem to give pre-eminence to Ra, the Aten being his visible form.



1 ‘like Aten,
2 the prince of truth/*maat* (note goddess hieroglyph),
3 who comes forth
4 from
5 ‘eternity’

Figure 8.1 Two perceptions of the Aten: as a physical manifestation of life-giving power, revealed at sunrise; and as an abstract upholder of order and righteousness, the ‘prince of truth’. In the sunrise picture the Aten rises above the desert horizon, its rays penetrating the ‘House of the Aten’ as attendants prepare food offerings on offering-tables. On the open land, animals (who run between large flowers) and

birds (ostriches) greet the sun. The sunrise picture is after Martin, *Royal Tomb* II, Pls 34, 35; the hieroglyphic text is in the entrance of the tomb of Ay (no. 25 at Amarna).

Akhenaten saw the Aten as the universal creator of all life, and celebrated this in hymns which have survived amongst the carvings in the rock tombs of some of his courtiers at Amarna.[5] They offer a panorama of the world, its forms of life, its different peoples and the ways that they were sustained by waters which came from beneath the earth. Everything was made to live and kept in daily motion by the Aten (who also had the responsibility for maintaining order (*maat*)). The sentiments were not new. A well-known hymn on a papyrus in the Egyptian Musuem, Cairo, and dated to before Akhenaten's reign, addresses the Theban god Amun in similar terms of universal power and solar imagery.[6] Where Akhenaten's hymn differs is in the absence of references both to Amun and to other gods which, in the older hymns, were seen as complementary aspects of Amun. In the Aten Akhenaten found a simple, unintellectual answer: the source of life was nothing but what he could see for himself, the disk of the sun. Mystery – the promise that there was always more to be discovered by delving into one's imagination – had no place in his thinking and had no place in the new temples. The sun's disk, devoid of human features apart from its many arms and hands, became the only divine image in Akhenaten's new temples and in the decoration within his own tomb at Amarna. This latter, in particular, shows the extent of his dismissal of current knowledge. Here we can make a direct comparison with what his predecessors and successors accepted. In the case of his father, Amenhetep III, his large tomb in the Valley of the Kings (no. 22) confined most of its decoration to the burial chamber (as did Akhenaten's). Its walls were covered with painted scenes and texts from the 'Book of What Is in the Otherworld' (Figure 2.16, *Above*, p. 92, illustrates a portion of this composition, in the tomb of Tuthmosis III).[7] Akhenaten's burial chamber bore scenes only of himself and his family offering to the Aten and, in one place, mourning the death of a woman of the royal family, probably his mother, Queen Tiy.[8] The elaborate depictions of an imaginary universe populated by gods had no place. Knowledge was to be found only in what was directly comprehensible to the external senses. The great cosmic balancing act between chaos and order, with its nightly adventures surrounding the sun boat, which had transfixed Egyptian minds for centuries, now no longer mattered. The animated forces – good and bad – which acted as parts of a semi-mechanical universe

were not needed. It was enough to be in awe of one omnipotent god.

Moral teaching was long established in Egypt, and tended to be separate from the world of the gods, where the prime interest was in how the universe functioned. There was, however, a link. This was *maat*, which can be translated 'truth', 'justice' or even 'righteousness' when applied to human conduct. It also embraced the stability and harmony of the universe. In a characteristic transformation of an abstract into something tangible the Egyptians had made Maat into a goddess, daughter of the sun god Ra. Maat, however, was a concept to be held in mind as a guide to behaviour, for commoners and kings alike. Maat did not intervene in lives although it acted as the standard against which one's life would be judged after death in the presence of Osiris. The Aten took over the proprietorship of Maat, becoming 'the prince of truth' (although, in a nice example of inconsistency, her name could still be written in the old way, as a goddess, Figure 8.1, p. 323). The epithet 'who lives on *maat*', which once was a prerogative of the gods, was used by Akhenaten regularly to describe himself. 'Who lives on truth' is one of the set phrases of Akhenaten's inscriptions, the words meaning that 'truth' was a substance which he consumed.[9] From the way that some of Akhenaten's officials, in their tomb inscriptions, praise the king for teaching them to distinguish *maat* from wrong-doing we might conclude that part of his vision was a moral cleansing of society and that he was the author of an 'instruction'.[10] Yet, as far as we can tell, Osiris and judgement of the dead had no place in the new order. Obedient listening to the king's words and taking his exhortations to heart seem to have been enough. We have no sources, however, to reveal in what detail, or with what examples, Akhenaten expounded his teaching.

The implied destiny of the individual after death – of the royal family and of commoners alike – was the survival of an essential part of oneself but no longer facing imaginary dangers. This emerges from absences rather than from statements, however. Although Osiris is not to be found in funerary contexts of the period, he seems not to have faced iconoclastic attack. Even in his early Eighteenth Dynasty temple at Abydos the few images of Osiris to have been discovered seem not to have been damaged.[11]

In our own modern perceptions of the world, ancient Egyptian speculative thought has no place. It represents a colourful (weird if we are honest) example of how the pre-scientific mind sought knowledge that reached beyond common experience. Akhenaten can appear to us as a remarkable and somewhat tragic figure because he seems to have

perceived the irrelevance of much of the thought of his day. By denying it he gave his contemporaries what was almost a blank sheet, a *tabula rasa*. But neither he nor anyone else who has left a record seems to have had a spread of knowledge of a different kind to put in its place, knowledge which satisfied the universal desire for a path of greater understanding which had depth and complexity and one which also fastened on the observable world of nature. Akhenaten seems to have been satisfied with the act of deletion and with the thought of a god alone keeping all in order. But the urge to find complexity cannot be denied of others. The idea that the material world, without its gods and demons, could be the platform for logical reflection on interrelated processes, leading to a picture of a more mechanical universe (as would come, in time, with Greek philosophy and, beyond that, the knowledge that we have now) did not arise. Instead, after Akhenaten the need for complexity returned but it was of the old kind, and continued to flourish and to develop new forms into the period of the Ptolemies. Then, through the Library at Alexandria, philosophical complexity of a whole new kind became available.

Because of the later history of intolerance, people are inclined to see Akhenaten as not only ignoring accumulated knowledge of the world of the gods but actively attempting to destroy its institutional foundations by attacking their temples. This is visible in the defacement of the name and images of the god Amun or Amun-Ra, whose form was human. But most of the old temples were largely left alone and may have continued to function. We cannot even be sure of what happened to the main temples of Amun at Karnak and Luxor and to their personnel (although redeployment to Aten temples would have been a straightforward matter). Continuing study of Karnak has located a likely site for the first of Akhenaten's new constructions, the 'Mansion of the Benben', which featured Nefertiti extensively. It was a colonnaded courtyard added to the then front of Karnak temple (the Third Pylon recently completed by his father, Amenhetep III). It would have enhanced the monumental portal to the three existing pairs of standing granite obelisks. This suggests that, once the images and name of Amun had been removed, Karnak temple remained usable as a monumental setting for ceremonies.[12] In our world consistency might well demand that existing temples, especially Karnak, be closed. But Egyptians of this time acquiesced in inconsistency of thought to a greater extent than we are generally comfortable with.

When Akhenaten's family line eventually failed (probably a little

less than 20 years after his death), kingship passed to men with military backgrounds, at first the general Horemheb and then the head of a family from the north-eastern delta, Rameses, who began the line of kings that we know as the Nineteenth Dynasty. They resumed the traditional patronage of temple cults, including that of Amun of Thebes, and, by extension, acceptance of the body of knowledge which defined the hidden aspects of existence (visible, for example, in the decoration of the mortuary temple of Rameses II at western Thebes, the Ramesseum, as in the example cited above, p. 321). No later stories or traditions concerning Akhenaten survive, although a later reference to him as 'the enemy of [i.e. from] Akhetaten' (the name of his city) and a characterization of his reign as 'the rebellion' suggest that they circulated.[13] At the official level, after his death the uncomfortable simplicity of his ideas together with his eccentric style of rule and portrayal of kingship were rejected, the statues of himself and family members were smashed and his stone monuments were demolished. He became a non-person, although the Aten itself escaped opprobrium and was absorbed back into mainstream thinking as an aspect of Ra. That we know about Akhenaten at all arises from the sheer quantity of the sculpture of his reign which later generations reused in foundations for other buildings, and from his creation of a complete city on a desert site (Amarna) which lay abandoned down to modern times. Because Akhenaten had been a prolific builder his existence could not be obliterated. But this points to a question which we can never hope to answer: did Akhenaten represent a small and usually undemonstrative, but nevertheless enduring, tradition of scepticism, even of intellectual dissent? Were there always those who found, say, the Book of the Dead an unconvincing exposition? Did Akhenaten's uniqueness lie simply in being king and thus able to bring an alternative vision into the public domain?

The lack of background sources cripples the historian. It has proved impossible to write a history of Akhenaten's reign which does not embrace an element of historical fiction. It is as if one has to decide which actor would best play the part: an effete, limp-wristed dreamer, or a fearsome, despotic madman. If the idealism points to the former, his approach to his own position and the simple fact that he achieved what he did takes one to the opposite pole. For Akhenaten's escape from the past had its limits. It was not his intention to diminish the power of Pharaoh. Between the simple vision of a life-giving sun on the one hand, and humanity and nature on the other, stood the king and his family as prime intermediaries. Here, too, came innovation.

Akhenaten showed himself ruling at the head of a group of three. The next in order of precedence was his principal queen, Nefertiti (her name also written in a cartouche). The third was their eldest daughter, Meritaten, who in some of the royal buildings is the only person named (though without use of a cartouche) other than her father, and seems to have had the role of administering the household. Together with other daughters (to a maximum of six) they were portrayed in a variety of styles, ranging from the relatively conventional to one intended to subvert the Egyptians' conceptions of good form (Figure 8.2).

*Figure 8.2*An official picture of the royal family relaxing at home. The picture was itself, however, an object of private veneration. It came probably from a chapel in the grounds of a private house. Limestone, height 32 cm. Akhenaten sits on the left, holding the eldest daughter Meritaten (who, married to Smenkhkara, became queen after her father's death). Nefertiti sits opposite, with the second daughter Meketaten (soon to die) on her lap, and cradling the third daughter Ankhsenpa-aten (later the wife of Tutankhamun) in her arms. Berlin Museum 14145.

The remains of temples which he built at Karnak very early in his reign show that the most extreme departures from convention were developed at this time. For Akhenaten they amount to a list of distortions: long, forward-leaning neck, pendulous jaw, narrowed

eyes, swollen belly and hips. The king always wears a crown, but when the characteristics are transferred to female members of his family they also include a rear elongation of the skull. This strange physique is most impressively seen in colossal statues where the viewer stands below, easily overwhelmed by the sheer weirdness of the overall effect (Photograph 8.1). It is less successfully translated into two-dimensional carvings on flat surfaces.

*Photograph 8.1*Sandstone statue of Akhenaten from his early building programme at Karnak. He wears the standard headdress of kings and above this a tall set of four plumes (mostly broken away) which, when seen from the side, resolve themselves into a single stylized feather. The statue is now in the Egyptian Museum, Cairo, with the catalogue number JE 49528. Height 1.85 m.

Many people have seen in the distortions to his body a faithful

attempt to portray the effects of a serious disease from which the king suffered. A more plausible alternative, however, is that we are seeing a bold attempt to define kingship as a force possessed of characteristics that place it outside the normal plane of human experience. There was little tradition in Egypt of using sculpture to convey an intellectual sensation more complex than that the life-force that animated, in varying degrees, gods, kings and ordinary humans was materialized in the form of the ideal, youthful, physically taught human body. What normally distinguished the statue of a god from that of a king or of a high official was the name written somewhere on the statue, and items of dress and insignia. They were to be experienced, however, in the same straightforward and unprovocative way. Akhenaten's self-images were experimental and surreal, made against an unsuitable cultural background. And it is a central point in assessing his intentions that this attempt to portray the mystery of superior force through surreal art rather than through word-game was confined to himself and his family. The shape of the Aten held no mystery. The divine force that passes understanding was revealed to mankind primarily through the Aten's earthly agents: the king and his queen. Hence the standard cartouche group: a large pair for the Aten, a smaller pair for Akhenaten and one for Nefertiti, the cartouche design itself defining beings who possessed the special authority of rulership. As we will see, however, the Aten was not shut off from the concerns and approaches of ordinary people.

The colossal statues of the king stood making their statement through their form. In some examples of two-dimensional art – palace paintings, wall reliefs and stelae – the royal family group was portrayed in scenes of relaxed informality, adopting postures of languor but also of mutual affection. Highly placed officials set up such images in their houses (Figure 8.2, p. 326). It is part of the puzzle of his reign to ask, how did Akhenaten and at least the senior figures on whom he depended regard each other? He expected deference in the age-old manner, yet at the same time promoted images which, at least to us, subverted it. According to the testimony of their prayers in their tombs his courtiers and officials loved and honoured him, and felt gratitude for the favours by which he had promoted them to their positions. This need not be empty flattery. History provides many examples of leaders with the power to attract slavish devotion. A simple generalization might not be appropriate.

Akhenaten's first major initiative in establishing the new vision of the state was carried out at Karnak, at the centre of the cult of Amun.

This took the form of several named constructions (one of them the 'Mansion of the Benben', mentioned earlier, p. 324) decorated with statues and wall scenes in the startling new style, with the whole operation being brought to a climax by a royal *Sed*-festival years before its traditional time. Thousands of small (52 cm long = 1 cubit) stone building blocks (commonly called *talatat* blocks) have been recovered from these early constructions, as well as pieces of colossal statues of the king. These are mostly in the most extreme artistic style of his reign, and, as already noted, show that it was developed at the beginning. The creation of Akhetaten was thus the further development of a scheme to which much thought and many resources had already been devoted.

The foundation: Akhetaten, 'Horizon of the Aten'

In the fifth year of his reign Akhenaten moved to establish a perfect home for the Aten, where it could be worshipped on clean ground uncontaminated by previous divine or human ownership. He gave it the name Akhetaten, 'The Horizon of the Aten'. Its location was roughly halfway between Memphis and Thebes: initially an unoccupied stretch of desert on the east side of the Nile, which was expanded a year later to include a broad tract of farmland, with its villages, across the river on the west side (Figure 8.3). Its essential human component, the king and his family, would worship in temples and occupy palaces set on the riverine edge of the desert, and be buried in tombs almost lost within steep-sided desert valleys even further to the east (beyond the cliff edge which defined the local horizon). Around the king and his family would gather officials and a supporting population that would eventually form a whole city. Modern terminology has given to the remains on the east side of the river, which include the city, the name Amarna (an abbreviation of Tell el-Amarna; a hybrid name invented by early European visitors).

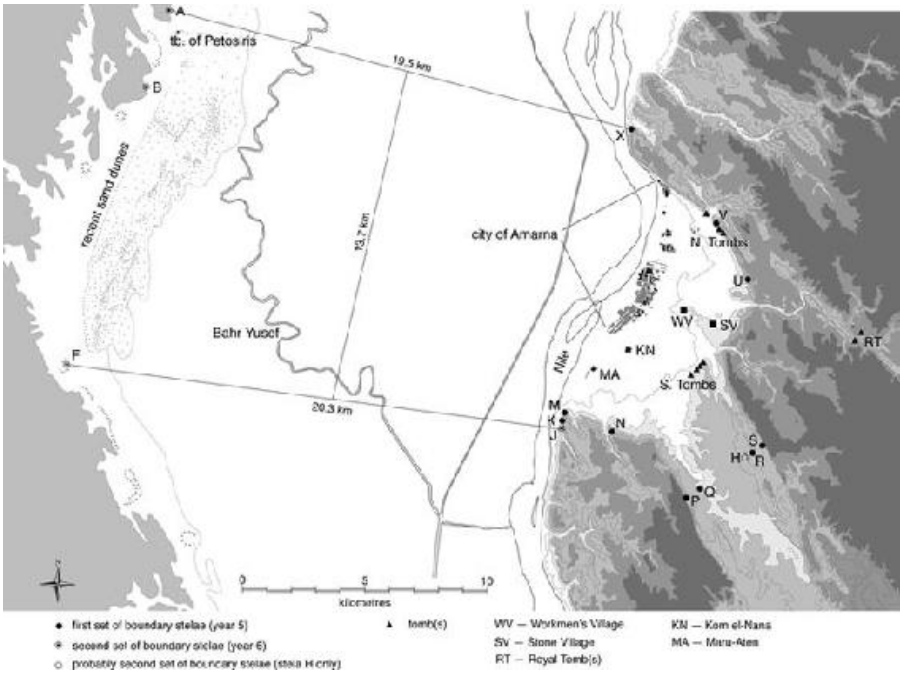


*Figure 8.3*Map of the Nile valley at Amarna showing the extent of Akhetaten, as defined by the Boundary Stelae (each of which is identified by a capital letter). The tomb of Petosiris near stela A, although of a much later period, is marked as being a well-known local landmark.

Akhenaten recorded his intentions on two series of tablets (the Boundary Stelae) carved at intervals in cliffs on both sides of the Nile, the first set (only on the east side) dated to the king's fifth year, the second set (on both east and west sides) to his sixth (Figure 8.4).[14] The latter contain an oath of the king:

> My oath of truth, which it is my desire to pronounce, and of which I will not say: 'It is false', for ever and ever: Akhetaten extends from the southern tablet as far as the northern tablet, measured between tablet and tablet in the eastern mountain, likewise from the south-west tablet to the north-west tablet in the western mountain of Akhetaten. The area within these four tablets is Akhetaten itself; it belongs to Aten my father: mountains, deserts, meadows, islands, high ground and low ground, water, villages, men, animals and all things which the Aten my father shall bring into existence eternally and forever. I will not neglect this oath which I have made to the Aten my father eternally and forever.[15]

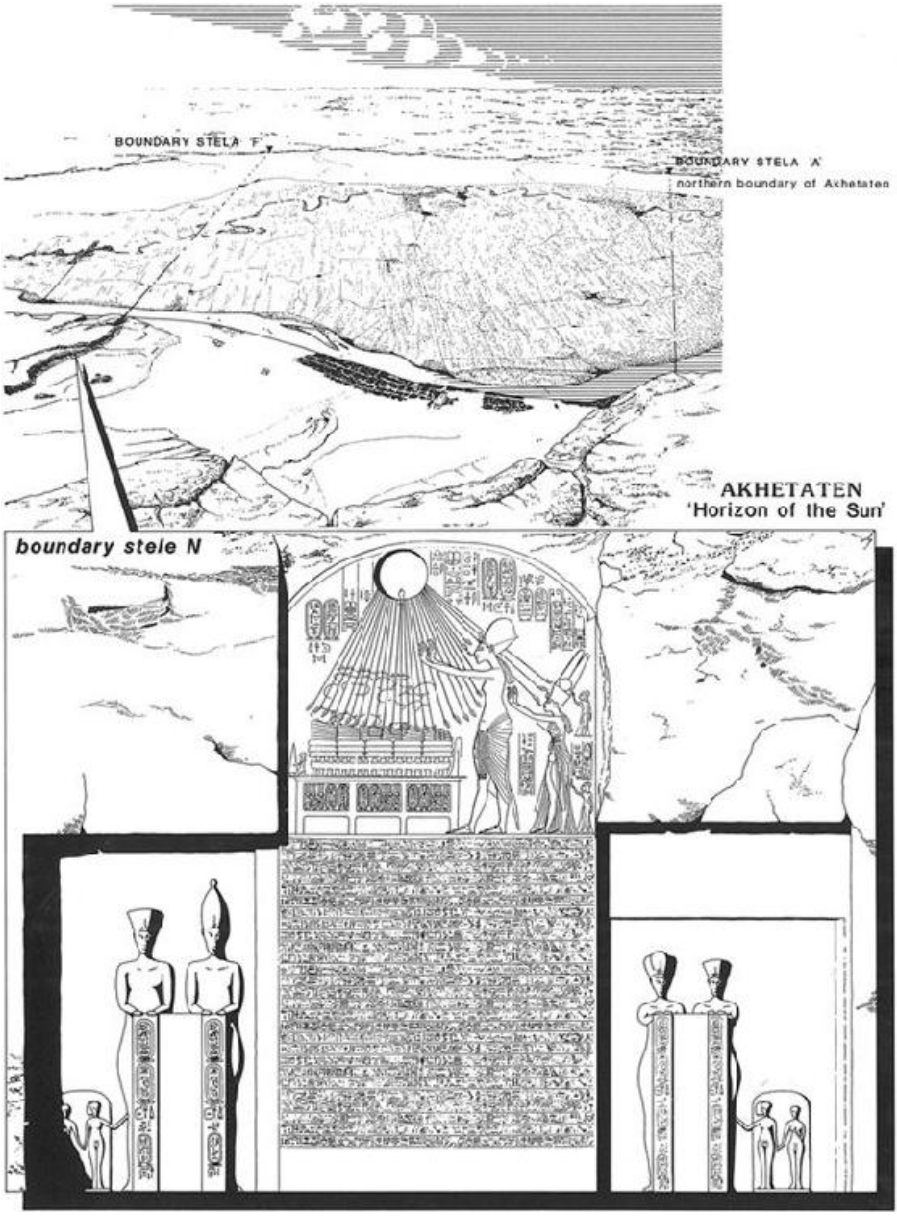


Figure 8.4 Akhenaten's new city, Akhetaten, 'Horizon of the Aten.' *Above*. Reconstruction of the Eighteenth Dynasty landscape showing the extent of cultivated land on the west side of the river which lay between the Boundary Stelae. *Below*. Reconstruction of the original appearance of one of the Boundary Stelae, 'N'. The stela, 3.9 m high, is flanked by statues. Each set depicts Akhenaten and Nefertiti holding in front of them a narrow vertical tablet inscribed with the names of the Aten and of themselves. They are accompanied by their two eldest daughters, Meritaten and Meketaten. Much of the stela and parts of the statues still survive.

On two of the tablets a second similar oath was repeated after another two years. One passage in the tablets has sometimes created the impression that Akhenaten swore never himself to leave the confines of the city. This, however, is a misunderstanding. The relevant passages, in stating that he will not go beyond the boundaries, mean that he will not extend the limits of Akhetaten beyond them. Another of the passages contains the very clear provision for his death when outside the city: 'If I die in any town of the north, south, west, or east, in the multitude of years, I will be brought and my burial be made in Akhetaten.'[16] This could mean that Akhenaten (and Nefertiti and Meritaten about whom the same is said) followed the age-old practice of travelling through the country, from palace to palace, to exert royal authority.[17] The statement is also the ultimate sign of Akhenaten's sincerity and his break with the past: the promise to site tombs for himself and for his family in the eastern hills, a new Valley of the Kings, with its security dependent upon the permanence of the new city. His courtiers were expected to site their decorated rock tombs in the hillsides facing towards the city and the Nile.

Why choose this particular location? Although he does not phrase it in quite this way in the Boundary Stelae, the chosen place had to satisfy certain criteria. The general tenor of imagery at Amarna (developing a long-established theme) was that the moment of sunrise above a clearly defined desert horizon was the beginning of the daily cycle of life and was to be appreciated with awe (Figure 8.1, p. 323). An Upper Egyptian location, on the east side of the valley, was thus to be assumed, even though the ancient centre of the cult of the sun, at Heliopolis, was in the north and lacked the dramatic setting of nearby desert cliffs. (This did not prevent the name Akhetaten from being applied in the Amarna Period to a location at Memphis and possibly also to Heliopolis itself, showing that it was not a name unique for one place). That it was to be a place of first usage, where the Aten could be discovered on land which had known no previous claims to ownership, immediately limited the options. On making a journey between Memphis and Thebes Akhenaten would have found few satisfactory locations. He would have seen many desert amphitheatres on the east where the sun rose above a clear horizon line, but most of them were already places of human settlement and homes to local gods. The choice of Amarna was probably the result of a process of elimination, which left him with the feeling (expressed in the Boundary Stelae) that the Aten had led him there.

The nature of Amarna has gradually been revealed by excavations

and surveys which began at the end of the nineteenth century, continued with breaks until 1936 and resumed in 1977. The city itself covered only a very small part of Akhetaten, as defined by the Boundary Stelae. Nevertheless, apart from the information it gives us about Akhenaten's concepts, the city is a major source for the study of ancient urbanism and of the lives of its inhabitants. Few archaeological sites of this size exist in the pre-classical world where the ground plan is as clear or as well documented, where large samples of material culture have been excavated and where a significant sample of buried human remains from the people who lived in the city has been retrieved for study. Although the circumstances of its founding are unique, it forms an apt basis for considering certain aspects of ancient Egyptian society, and for illustrating the impact which kingship could have on it. Modern visitors might be struck by the absence of clearly visible monuments, however. Starting in the reign of Horemheb all architectural stonework, from entire temples to the doorframes of houses, was systematically removed for re-use elsewhere. Many of the blocks were taken across the river to El-Ashmunein (Hermopolis), where hundreds have been recovered and more can be seen incorporated in the standing masonry of later temples.[18] By contrast, the greater part of the city, extending to portions of palaces, was built from sun-dried mud brick, and these buildings, once their door frames and columns had been removed, were left to decay by natural processes.

The Amarna Boundary Stelae do not actually mention a city. In the initial vision of the first set of stelae, the place Akhetaten was a tract of clean and empty land dedicated to the sun god. But it required human participation for it to function properly. In the first rank stood the royal family. The first set of stelae provides a list of constructions essential to the royal family's presence:[19] a 'house' and a 'mansion' of the Aten (the two main Aten temples that have survived); a 'Shade of Ra' for Nefertiti (her sun temple, the archaeological site of Kom el-Nana); a 'House of Rejoicing', which is here probably a poetic reference to the Great Palace (at this time it seems to have referred to a place where the king was and had been used, for example, for part or all of Malkata; see pp. 272, 273); and 'apartments' for Pharaoh and for the 'Great King's Wife' (Nefertiti). There are also provisions for tombs, both of the royal family and of cult personnel who turn out to have been Akhenaten's courtiers and senior officials. The king was both the leader of the daily adoration of the Aten and the centre of government for Egypt and for a substantial empire. There was an

inescapable need for a court, for an administration, and for a population who would serve them and supply their wants. Akhetaten, presented as an idealistic vision, developed into a city as we understand the term, with large housing areas that also acted as centres of manufacture, served by an inland port (a length of the river bank) although, in Akhenaten's eyes, these aspects did not merit specification in the announced blueprint.

It is doubtful whether Amarna was laid out in anything other than a simple, pragmatic way without reference to an overarching design concept.[20] What appeared on the ground was a confluence of planning and self-organization, and a retreat from the urge to create a layout in accordance with a geometric scheme which peaked in the Middle Kingdom. The boundary to Akhetaten on this side of the river was the curving line of cliffs in which the stelae were carved. Nothing was built along it, nor was a perimeter wall constructed on the desert plain below nor, from the way the city developed, does it seem that an edge of any kind was marked. The lack of a city wall, with gates, suggests that Akhenaten carried through his plan in the confidence that his rule was not going to be opposed. The main act of foundation seems to have been a long, straight line which came to serve as a thoroughfare and which positioned the main royal buildings (Figure 8.5). Its northern half now runs approximately parallel to the course of the river, and ancient depictions of the Amarna landscape suggest that the river has not changed its course significantly.[21] The northern end of the line was fixed where the desert begins to rise steeply as the cliffs approach the river. This choice necessitated angling the line towards the river. The southernmost building to follow this line is the enclosure at Kom el-Nana (the sun temple of Nefertiti), 6.5 km from the northern starting-point. The southern part of the line (south of the Small Aten Temple), however, was quickly lost beneath the largest of the housing zones, to which the street plan paid no heed.[22] The map suggests that this southern stretch of the line became inconveniently distant from the river, the main housing area following the curve of the river bank more closely. North of the Small Aten Temple the line seems to have been maintained as a continuous road linking the royal buildings and providing a route on which Akhenaten and his family, accompanied by a bodyguard, could process in their chariots (Figure 8.6). In modern times it has been called 'Royal Road', with a length of *c*. 4 km (much of it now lost beneath modern fields).

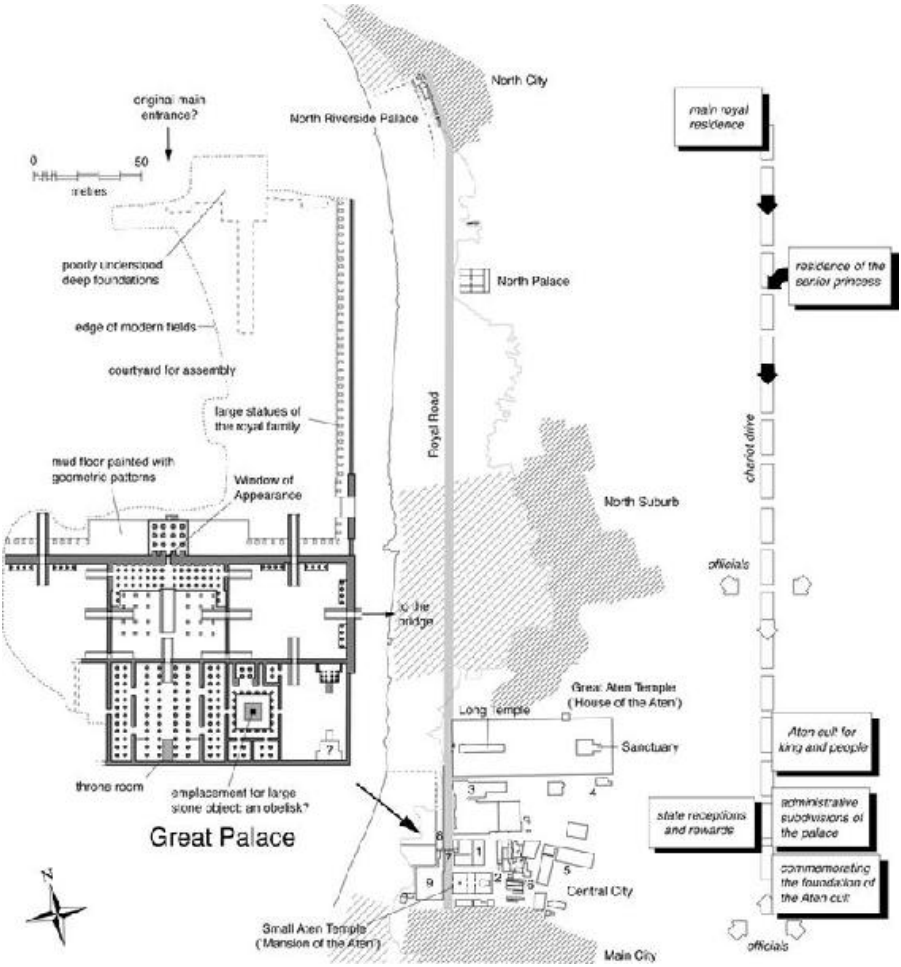


*Figure 8.5*Diagram of the principal structural element at Amarna, the royal processional route, 'Royal Road' (a modern name). On the left is a reconstruction of the plan of the stone portion of the Great Palace based on surviving foundations. Numbered elements in the Central City: (1) King's House; (2) 'Bureau of Correspondence of Pharaoh' (records office); (3) bakery, part of the large central provisioning depot; (4) administrative base for Panehsy, 'first servant of the Aten'; (5) stables and barracks for police; (6) scribal village; (7) bridge linking the Great Palace with the King's House; (8) private apartments for the king, with garden and painted pavements (Figure 6.14, p. 281); (9) hall of 544 brick columns from the time of Smenkhkara. Despite our detailed knowledge of the foundations of the Great Palace, some of the key identifications remain conjectures, including those of the Window of Appearance and the throne room.

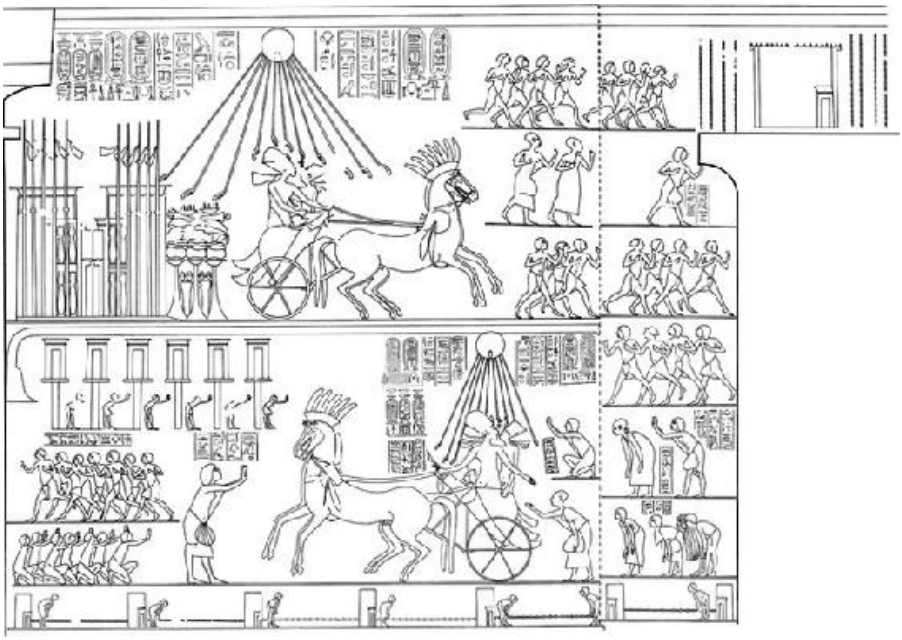


*Figure 8.6*The royal chariot drive. *Upper register*. Akhenaten and Nefertiti in a chariot leave the main Aten temple (the 'House of the Aten', represented as a pylon entrance with flagpoles). They head towards a fortified building set between what look like fences, probably the North Riverside Palace (Figure 8.5, p. 332), flanked by a running bodyguard headed by the 'Chief of Police of Akhetaten, Mahu.' *Lower register*. The royal couple drive along a road marked by what looks like the same fence interrupted by small buildings; a row of doorways apparently reached by paths appears above. Mahu and his bodyguard are prominent. From the tomb of Mahu (no. 9), after Davies, *Rock Tombs* IV, Pls XX–XXII. The landscape of the scene has been the subject of different interpretations. Are the small buildings that the royal family pass located in the city or in the eastern desert, where they have been interpreted as the rock tombs or even the Boundary Stelae? See the discussion in Stevens, *Akhenaten's Workers* I, 416–21.

It must have been self-evident that a large population would also move to Amarna, estimated (on inevitably insecure grounds) to have been in the low tens of thousands (20,000 is a convenient figure to keep in mind; see below, p. 361). Mostly they lived in two large housing areas (the North Suburb and Main City, both of which are modern terms), lying north and south respectively of the main concentration of royal buildings, the Central City. A third area of housing (the North City) lay separately at the northern end of Royal Road. The Middle Kingdom had seen the growth of a tradition in Egypt of simple grid planning, applied to the streets and houses of settlements up to the scale of full-size towns. But in the New Kingdom the idea of total planning lost its attraction. In Amarna, outside the corridor of royal buildings, planningpetered out altogether. Instead of

a grand unitary design we find a few broad but far from straight streets running more or less parallel to the Nile to join the suburbs to the centre, while narrower 'streets' (sometimes no more than irregular access spaces) cross at right angles.

The key concept to hold in mind is that of self-organization, which was mentioned in Chapter 5 as being the counterpoint to the geometric planning of settlements (Figure 8.7, p. 336).[23] When groups of people interact without strong constraints imposed from outside, they tend to find a level of co-operation which recognizes (though never perfectly) personal and small-group differences. They negotiate amongst themselves, and a degree of order stabilizes itself. The result, in the modern world, is to be seen in informal settlements (squatter townships, *favelas*), usually outside the scope of government planning and control. At Amarna we see the same process at work but carried out with the participation of the higher reaches ofsociety, the official class. We have to imagine a large number of the future inhabitants of Amarna – whole families of poorer people, together with representatives of the richer ones – arriving over a short period of time at a largely empty and unmarked stretch of desert beside the river and hastening to lay claim to a patch of ground which they would soon cover with the dwellings they could afford. There were clearly some constraints and preferences. Most people would have belonged, by various ties, to the household of a senior official and would naturally locate their dwelling in close proximity, thus creating fuzzily defined 'villages'. Their co-operation, perhaps aided by the provision of a builder and building materials, manifests itself in shared walls and spaces.[24] The senior officials themselves spaced their plots of land in part to give themselves 'territory', and in part to reflect ties of common interest with others of a similar rank, which we cannot reconstruct. Their houses are isolated or clustered to varying degrees. Proximity to the Central City or to Royal Road seems to have held little if any attraction. Thus one of the king's most senior officials, the vizier Nakht, lived almost as far away from the king as he could.[25] The house of the 'first servant of the Aten' Panehsy (one of the favoured few with a large tomb in the northern group and, in his case, an official residence beside the Great Aten Temple) lay in the Main City, well back from Royal Road;[26] another senior figure in the Aten cult, Pawah, lived in a large house in the middle of the Main City.[27] As these various processes unfolded so gaps, largely accidental at first, became established paths of access. The most frequently used were those which took officials from their houses to their offices in the

centre, travelling to and fro by chariot, which was an aspect of life recorded in some of the tomb scenes. Yet even these primary routes, running parallel to the river, were not laid out with straight sides and even widths.[28]

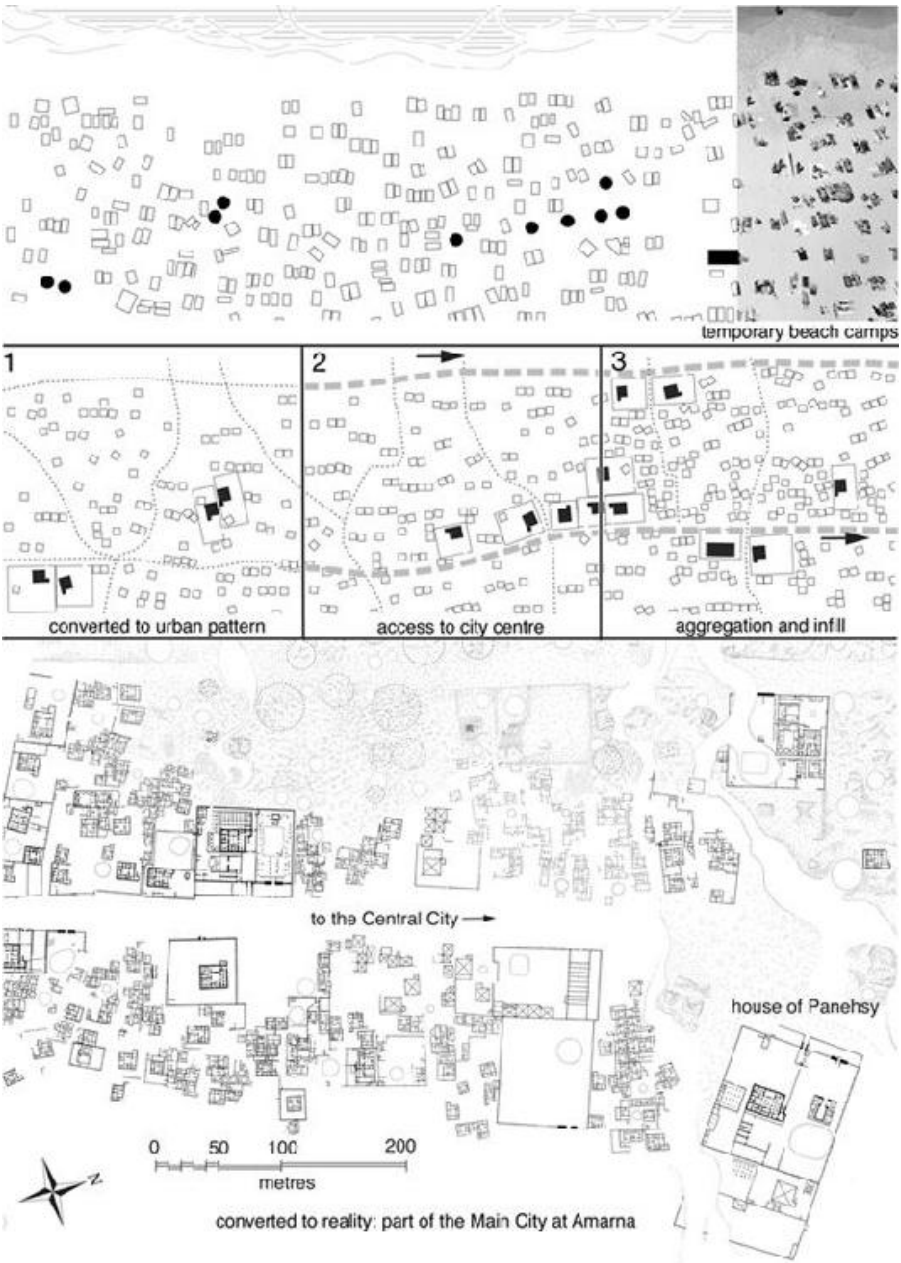


*Figure 8.7*Self-organization at work. At the top is a near-perfect example of self-organization where minimum constraints apply (temporary camps at a seaside beach, where open rectangles are beach towels, black circles are *Caption for Figure*

8.7 (continued) umbrellas and the one black rectangle is a trailer). The second register has three sections illustrative of a progressive dynamic. (1) A conversion of the top register to an urban pattern where most houses are small but a few are larger and within walled courtyards: these are the umbrellas and trailer of the top register. A selection of the almost unlimited number of potential pathways amongst the beach camps has been marked. (2) and (3) introduce factors which disturb the normal dynamic of self-organization. These are (2) the need for access to the city centre and (3) the aggregation of smaller houses towards the houses of local patrons, and gradual infill of open spaces as time passes. At the bottom is a section of the Main City at Amarna, after Kemp and Garfi, *Survey*, Sheet 6 (part). The beach plan of the top register is based on an aerial photograph by Gray Malin, www.designboom.com/wp-content/uploads/2013/06/aerial-beach-gray-malin-designboom02.jpg.

The result is not the city we might have expected, with a predetermined geometrical form. Instead it beautifully exemplifies self-organized order. Each part, at ground level, was unique, instantly familiar to its occupants, and acceptable. It was acceptable because it worked: it matched its shape to the complex personal interrelationships of its inhabitants.

The arena of royal display

The point was made in Chapter 6 (p. 275) that the sources for Akhenaten's kingship create, quite unintentionally, a caricature of the public role of the charismatic leader as it has survived from the Bronze Age to this day. The elements can be summarized thus:

1. the state procession;
2. armed escorts;
3. postures of special deference for those allowed to approach;
4. the 'Appearance', alone or with family, at a public or semi-public balcony;
5. the open-air review of troops and representatives of client societies;
6. the leading of public or semi-public acts of worship of a symbol or symbols of the state's power;
7. pictures of the leader, alone or with family, in people's own homes (Figure 8.2, p. 326).

A major palace stood at either end of Royal Road (Figure 8.5, p. 332). Most of the North Riverside Palace in the north (being part of the North City) has been lost to cultivation and through earlier erosion of the river bank.[29] What survives is a substantial length of double wall,

with external towers or buttresses, which, more than is the case for other buildings at Amarna, appears to have been designed to provide a high level of security. Between the wall and the palace proper (of which only a tiny corner has been found) were storerooms and other buildings which might have been barracks. Across the road lay a group of houses, of which some were the largest in the whole city and presumably for some of the courtiers closest to the king (none of the owners having been identified by inscriptions). The North City was closed at the north by a large administrative building terraced up into the lower slopes of the cliff, and containing a huge warehouse block for commodities, with part of it perhaps having been a granary. This might imply that the North City and the king's private residence were self-sufficient in food, with a supply independent from the sources which sustained the rest of the city. This whole part of the site, because of the overshadowing cliff, has a very different atmosphere from the rest of the city, and was evidently as attractive a place to Akhenaten as it remains to visitors today, and was more easily sealed off from the rest of the city.

At the southern end the Great Palace occupied the western side of the Central City, probably as far as the waterfront (Figure 8.5, p. 332). A picture in one of the rock tombs (no. 14, of May) shows a colonnade above a stretch of river bank at which boats are moored, including what appear to be two state barges.[30] Much of the Great Palace had been built from stone. The heart of the building was an immense courtyard (*c*. 160 m square) surrounded by colossal granite and quartzite statues of Akhenaten and his family. Beyond it, to the south, lay a complex of halls and smaller courts and monuments, probably terminating at the back with a throne room. The whole architectural ensemble provided the king with a sumptuous and solemn setting in which formal receptions and ceremonies could be held and which advertised his new style of reign. From the point of view of his courtiers and officials, the most important ceremony was that of personal reward by the royal family at a public gathering in front of a Window of Appearance.[31] Pictures of personal attendance at the Window of Appearance are common in the tombs at Amarna (Figure 8.8; cf. Figure 6.10, pp. 271, 286). The tomb owner receives gifts of gold and other precious things, or hears the formal announcement of a promotion to higher office. We know from the Horemheb Edict (p. 270), however, that the reward ceremony could also be used for the regular distribution of rations, in this case to soldiers providing a household guard. The Window of Appearance was a repeated

ceremonial reminder of the dependence of the state's officials on the king. Its exact location at Amarna has long been a matter of debate. I have placed it at the critical junction in the Great Palace between the partially roofed and more hidden southern section and the giant courtyard on its north where large crowds could gather. This seems to match the desire, long-established at shrines and temples, to create a moment of drama when an object of deference (a portable image or the person of the living king) made the transition from a screened-off location to visibility. This interpretation of the Great Palace finds a parallel in the temple of Luxor (which also faced downstream of the Nile), where a major object of deference was the king on his emergence at the climax of the Festival of Opet.

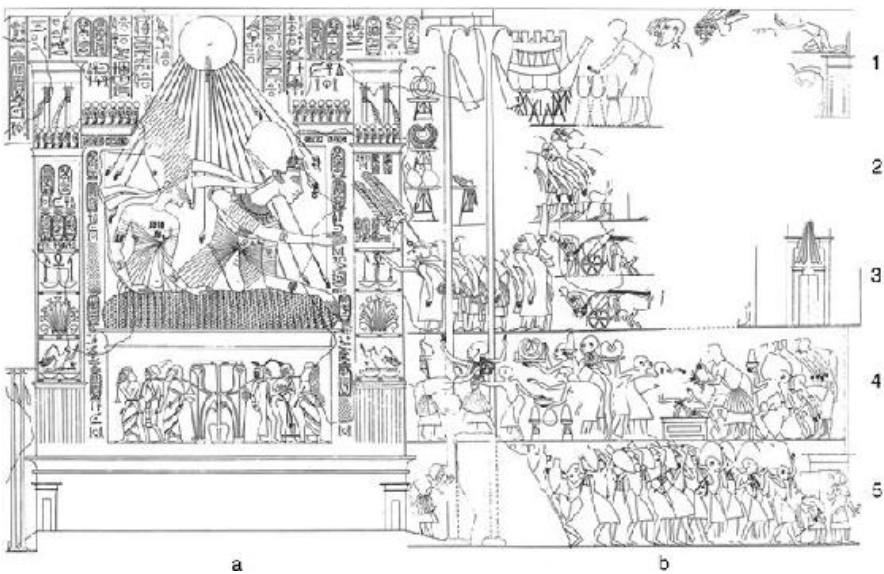


*Figure 8.8*Akhenaten at the Window of Appearance, rewarding one of his loyal officials, Parennefer. Note the 'unification' symbol with bound captives which appears below the window in section (a), cf. Figure 6.10, p. 271. In register 4 of section (b), at the left end, the official Parennefer receives gold necklaces bestowed by the king, whilst to the right servants and scribes record other gifts and pack them into a chest. Register 5 shows pottery amphorae and baskets of commodities being carried out, showing that the ceremony included the distribution of goods of a more mundane, ration-like kind as well as precious objects. The upper registers (1–3) depict other officials and courtiers (awaiting their turn?), and some of their waiting chariots. From the tomb of Parennefer (no. 7), after Davies, *Rock Tombs* VI, Pl. IV.

Alongside this formal stone-built part of the Great Palace, a set of halls, courts and a sunken garden, with mud-brick walls, offered a more secluded place for the royal family to retire to, the walls and floors covered with brightly painted scenes (see Figure 6.14, p. 281

Right, for the painted pavements).[32] Further to the south and beyond the back of the Great Palace a hall of 544 rectangular piers constructed of mud bricks was later added, much of it consisting of a single, uninterrupted covered space. Many glazed tiles found in the debris may have been used to decorate its surfaces. A few loose bricks stamped with the name Smenkhkara (Akhenaten's male successor) were also found in the ruins and perhaps point to its date. Acting like a huge tent with brick instead of wood supports, it could have provided additional space for assembly, perhaps for banquets at times of state funerals and coronations.[33]

Royal Road linked these two principal palaces, the Great Palace for the business of kingship, and the North Riverside Palace offering a safe base away from the main city. It also provided a route for a processional chariot drive by the royal family, often depicted in the private rock tombs (Figure 8.6, pp. 334–5). In Chapter 6 we saw how important to the city of Thebes were the processional festivals of its gods, and how they provided a round-the-year public spectacle and a symbolic claim to the external world by traversing long distances. For the most important of them the king arrived to add to the sense of occasion and, reciprocally, to enhance his own standing. The worship of the Aten stopped this. There were no sacred boat shrines to carry. The Aten's disk made its own way across the sky, permanently in procession. Akhenaten had created another vacuum and tried to fill it with processions of himself as the focus of public adulation, replacing with military dash the stately, colourful and noisy bearing of the divine images of old. Here again we catch a foretaste of the world to come. King, queen, daughters, retainers in their chariots, the bodyguards running along in a stooping posture: we can recognize the basis of the scene re-enacted today in capital cities and on state occasions the world over. The presidential limousine, the royal landau, motorcycle outriders, presidential advisers and security guards, all are parts of a public performance acted out over the subsequent millennia as rulers and leaders have responded to the urge for public acclaim.

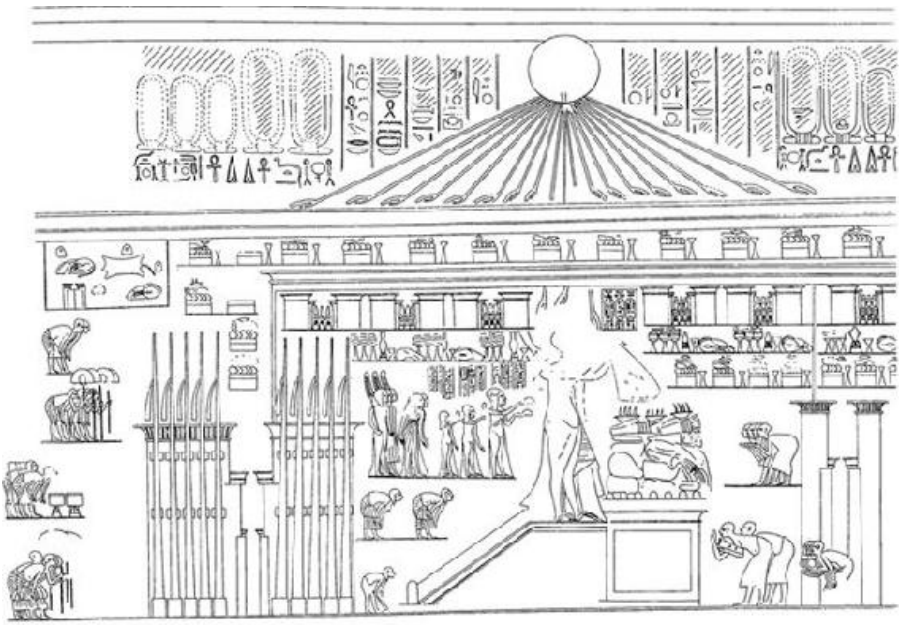
On its way south, the Royal Road passed an isolated building facing the river, the North Palace.[34] When excavated in the 1920s it was found to be a self-contained royal residence, largely constructed from mud bricks. It included formal reception halls, a domestic suite with bedroom and bathroom, an open-air solar temple and gardens and courts, where the walls were painted with bright scenes from nature, and live animals and birds were kept. The many fragments of

inscriptions recovered show that the person for whom the palace was finally intended was the eldest daughter, Meritaten, who seems to have acquired the responsibility for running the royal household. In its basic purpose – providing a quite separate palace for a major queen and her staff – it conforms to the type of harim-palace documented both from texts and from the site of Medinet el-Ghurab (pp. 277, 279). Meritaten was also provided with a private retreat, a walled enclosure at the far southern end of the city, which combined gardens with pieces of formal stone architecture, including a shrine, which was named Maru-Aten (see further below).

Akhenaten's stated purpose in founding Akhetaten was to establish a place worthy of the Aten. Cliffs and desert almost achieved this in themselves. What was further required (in Akhenaten's mind) was a place where he could demonstrate his commitment, by ceremonies which centred on a concept so fundamental in Egypt that Akhenaten seems to have taken it for granted: the presentation of offerings, primarily of food. Deference and praise by thoughts and words were not enough. Actions (involving much administration and movement of commodities) were essential. Conventional large temples built up huge stocks of foodstuffs and other goods which were together referred to as 'offerings'. The temple buildings themselves, however, allowed for only token portions to be actually brought before the images of the gods. To judge from the design of his Aten temples, Akhenaten felt it necessary to bring out into the sunshine (where the Aten's presence was to be seen and felt) a far larger portion. This was made possible by constructing hundreds of fairly small rectangular offering-tables from stone or mud brick on which the food (bread, joints of cattle meat and birds, accompanied by bouquets of flowers and bowls of incense) could be stacked, supplementing them with stands and wooden tables, some of them to support jars (probably of water, an important purificatory element in offering-ceremonies[35]).

Scenes and texts from Amarna show that the main place where all this would take place was the 'House of the Aten' (Figure 8.9). This can be identified on the ground with the spread of remains known today as the Great Aten Temple.[36] It ran back from the east side of Royal Road from a point towards the northern end of the Great Palace. It was given a huge enclosure surrounded by a mud-brick wall, 260 m wide × 730 m long. Large parts of the interior seem to have been open space. By the time Amarna was abandoned, two large stone buildings – the Sanctuary and the Long Temple – had been erected on its east–west axis with a gap of some 340 m between them. The

Sanctuary, towards the eastern end, seems to sum up the essential nature of the Aten cult (Figure 8.9). It was to be performed within a walled but roofless courtyard filled with many offering-tables, in this case numbering around 150. The courtyard was slightly elevated, allowing its sides to be built up into slopes. From each side, an L-shaped wall extended forwards to mark a bounded space, which embraced the main part of the building. The intention was perhaps to depict in a simplified, miniature form the place of sunrise at the encircling cliffs in the desert behind.



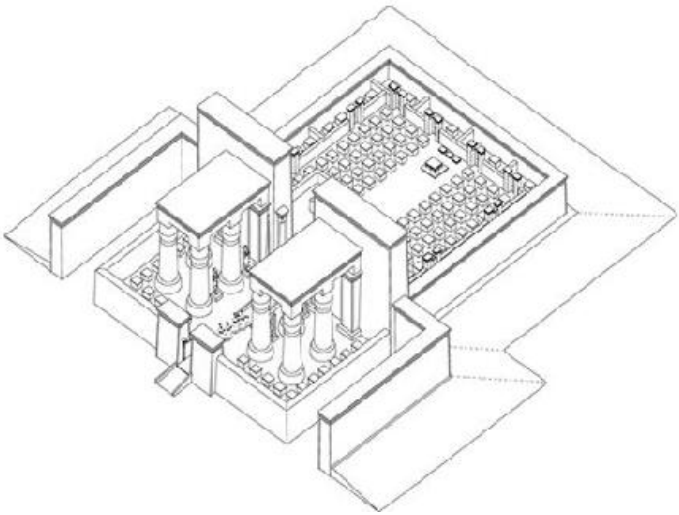


*Figure 8.9*Semi-public ceremonies in the 'House of the Aten' (the Great Aten Temple) at Amarna. *Above*. Akhenaten and Nefertiti (her figure partly lost) stand together on a platform within the temple making offerings to the Aten. They are accompanied by three daughters, each of whom holds out a metal rattle (sistrum), and by groups of obsequious onlookers (some of them, especially those to the right of the platform, presumably temple staff). Within the temple are numerous small offering-tables and offering-stands within separate small courts. Note the cattle slaughterhouse in the top-left corner, with its tethering-stones. Despite the amount of detail, the results of excavations (some of them shown in Figure 8.10) show that an important 'public' aspect of the life of the temple is omitted. From the tomb of the 'first servant of the Aten' Panehsy (no. 6), after Davies, *Rock Tombs* II, Pl. XVIII. *Below*. Reconstruction of the Sanctuary of the Great Aten Temple. The sloping external surround and projecting 'wings' at the front are perhaps an attempt at simplified modelling of the desert cliffs which encircled the place of sunrise at Akhetaten. The drawing appears in Kemp, *City*, 95, Fig. 3.17.

A second version of the Sanctuary was built to the south, inside its own enclosure. This was the 'Mansion of the Aten' (or Small Aten Temple in modern naming practice), with its towered enclosure subdivided by cross walls, each of them entered between large pylon towers.[37] If one stands at the front of the temple pylons and looks directly along the temple axis to the distant cliffs (a view that would originally have been blocked by the high walls of the inner constructions), one will find that the temple axis points roughly towards the entrance to the wadi which leads to the Royal Tomb. On modern maps a prolongation of the axis more or less crosses the location of the tomb itself.[38] One can argue from this that the temple was designed to provide for a permanent offering-cult for the royal family (Akhenaten, Nefertiti and Meritaten) who, according to the Boundary Stelae, were the intended occupants of the Royal Tomb. The presence in the second court of a small building which probably consisted of a robing-room and Window of Appearance adds some weight to this, for this feature was an essential element of the royal mortuary temples at Thebes.[39] So, too, does the use of the term 'Mansion', which was commonly, though not exclusively, used for funerary temples and shrines in the New Kingdom. The primacy of its location could also have arisen if it were the place where the foundation ceremony for the establishment of Akhetaten and the Aten cult were celebrated (described in the second set of Boundary Stelae).

An apparent synonym for the 'House of the Aten' was 'Mansion of the Benben', in one place accompanied by a hieroglyphic determinative of a round-topped stela (Figure 3.14 (4), p. 142). As noted earlier (p. 141), from early times this was the shape of a sun symbol, the original possibly standing at Heliopolis, just outside

modern Cairo. The origin of the shape and reason for its connection with the sun are not really known, but its retention by Akhenaten is one of many signs that in the form and presentation of his cult he relied heavily upon traditional ideas. A *benben*-stone was not, however, the focal point in the open courts where the Aten was honoured. This point was marked by two larger offering-tables (each with its own court) which, in being shown with open sides, were probably made of wood covered with gold leaf.[40] The round-topped stela is shown in the reliefs occupying a separate location in front and to one side of the Sanctuary.[41] To judge from many stone fragments found at the likely actual site, it bore an extensive list of offerings although the excavation of the site has brought to light no remains of offering-tables.[42]

At the front of the enclosure of the Great Aten Temple stood the Long Temple (of which the ancient name may have been 'Gem-pa-Aten', or 'The Aten is found'). In the place of one main courtyard came a series of six, one behind the other, all filled with offering-tables, at this time reaching a likely total of at least 750. They extended from behind a broad entrance flanked by stone pylons fronted by a pair of deep porticos, each of eight colossal columns.

At first sight the correspondence between the plan of the temple recovered by excavation from marks left on a foundation bed of cement and the pictures in the tombs (Figure 8.9) seems fairly close. Examination of the remains through archaeological excavation changes that perspective, however. Two conclusions can be highlighted. The first is that the remains are not all of one period. This might seem surprising in view of the temple's brief history. Nevertheless, in the case of the Long Temple the evidence points to substantial rebuilding and enlargement during Akhenaten's reign, beginning after his twelfth year.[43] We cannot thus be certain that the final version of the temple was finished before the Amarna Period ended. Moreover, because the foundations of the second temple obliterated all trace of the earlier stone building, we do not know whether it was similar in size and design or different.

The second is that the tomb pictures, despite their detail, are filtering out some of the activities for which provision was made on the ground that surrounded the stone building. The space (*c*. 50 × 15 m) between the formal front of the Long Temple and the gateway in the mud-brick enclosure wall was used for a purpose centred on low rectangular pedestals made of mud and mud bricks that measured *c*. 1 × 2 m (Figure 8.10).[44] Each was surrounded by a shallow trough, in

most cases subdivided by partitions to create more or fewer basins, with each construction coated with a thick layer of lime-gypsum. This was periodically renewed, sometimes in conjunction with modifications to the trough and its partitions. Each set of pedestals and troughs was made separately, roughly in line with others, but given individual treatment according to its own schedule. They were not made and maintained as a single system. It is likely that the basins were filled with water, drawn from small circular reservoirs (though the ultimate source of water has yet to be discovered), which also sometimes saturated and distorted the ground. At the same time, and spread across the surrounding ground in an asymmetrical layout, groups of offering-tables were constructed, either in white-plastered mud brick or, occasionally, in limestone blocks. They, too, came and went in response to decisions which did not necessarily affect all of them. In addition, a field of 920 mud-brick offering-tables was laid out in rows to the south, but was later buried by a layer of rubble which raisedthe level of the temple ground in the second period. These external facilities imply a form of management that gave attention to individual parts as and when they were required, implying in turn that it served individual needs, in effect, 'customers'. One possibility is that the low whitened platforms were places where the dead were temporarily laid out for purification at the same time that offerings were placed on groups of the offering-tables. These structures would then be the practical expression of the desire to receive perpetual offerings in the temple, which we find in prayers in the tombs of Akhenaten's officials. In whichever way we interpret this evidence, it tells us that the temple supported a life which is not hinted at in the formal pictures, although it would have turned the main temple to the Aten into a place of public benefit under the king's patronage.

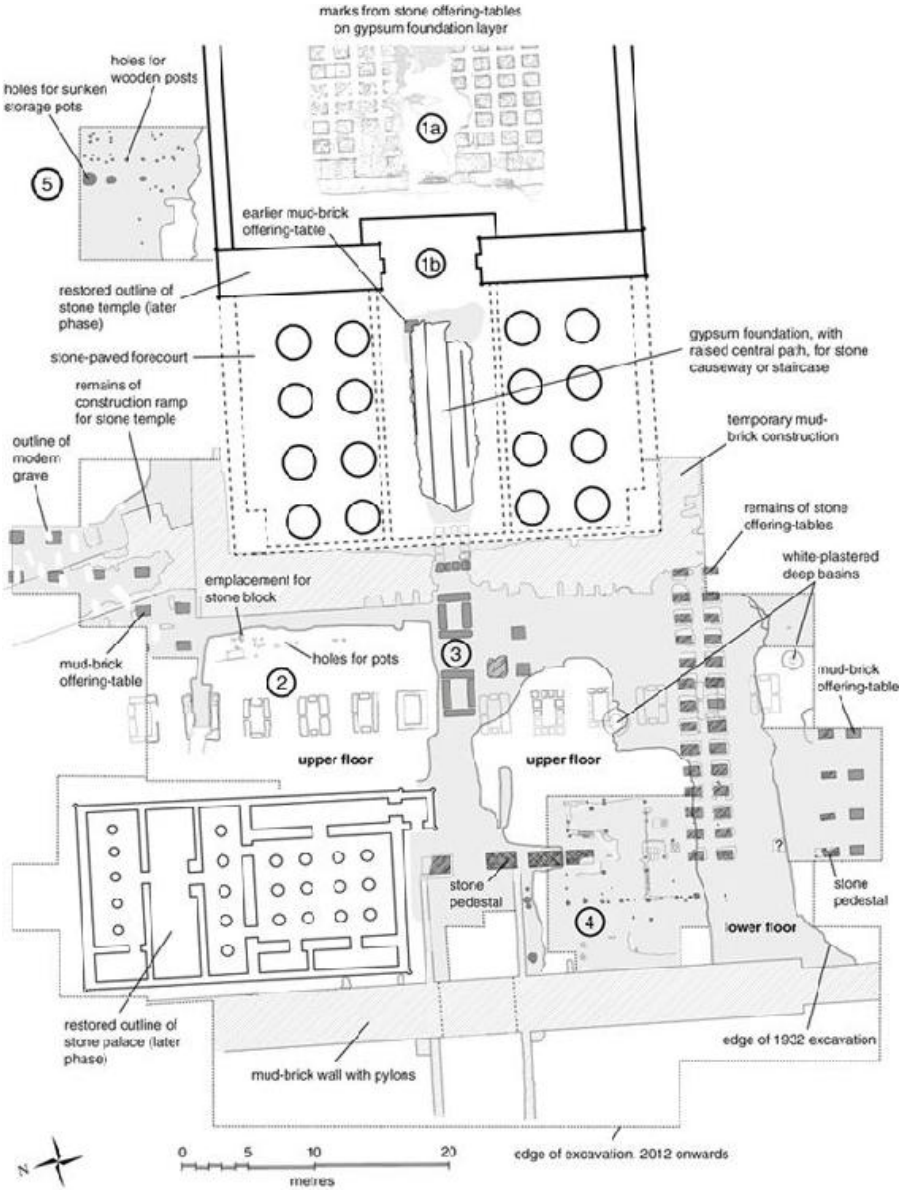


*Figure 8.10*Uncovering the untold story of activity at the Great Aten Temple. Contemporary pictures (of which Figure 8.9, Above, is an example) make the temple the exclusive preserve for the royal family. Excavation (still far from complete) reveals a more complex picture, with provision outside the stone temple for activities which probably served the needs of the people – especially those centred on the dead – and was subject to piecemeal modification.

Note that the temple shows two major phases of building and use, each represented by its own mud floor. Elements which are shaded in grey belong to the lower floor. The irregular outlines of the preserved areas of the upper floor represent the edges of an excavation carried out in 1932. Prior to the second phase of building (after Akhenaten's year 12) constructions of wooden posts and screen walls were laid out on the mud floor.

Key to numbers in circles (1a) and (1b) Two possible locations for the large offering-platform (or altar) shown in Figure 8.9, *Above*. Location (1b) is implied by the foundation for a stone causeway or staircase lying to the west. Location (1a) limits the width of the platform to *c*. 2.5 m. (2) North–south row of rectangular mud pedestals surrounded by narrow basins, all surfaces thickly coated with gypsum plaster, laid out on the upper floor. (3) East–west row of similar basins laid out on the lower floor. (4) Pattern of post holes from a building of wooden uprights and screen walls, probably facing north, and provided with a mud-brick construction (probably a low platform) which had been decorated with foreign captives painted on gypsum plaster, a sign of royal presence. The mud plaster floor had been laid over a series of stone pedestals which must have supported upright stones from the very first temple layout. (5) Post holes from the edge of a building of posts and screens, alongside a row of buried pottery storage jars (taken out when the building was removed).

Early in its short history, the temple also saw a phase of construction in which wooden posts played a major role, the evidence in the form of alignments of post holes. Towards the front of the Long Temple, post holes define a building (of at least 16 × 7.5 m) subdivided into two sections (Figure 8.10 (4)). Fragments of painted gypsum floor plaster, recovered from deep within one of the post holes and depicting foreign captives, imply that this was a place where the king appeared, so that the building was, in effect, a small wooden palace. One side of another building of posts and screen walls has been found close to the north side of the later stone temple (Figure 8.10 (5)), built alongside a row of buried pottery jars. A third appearance of timber construction is at the site of the round-topped stela situated between the Long Temple and the Sanctuary, mentioned above. A stone-built supporting platform and access stairs had been preceded by a small mud-brick platform surrounded by large wooden posts. Pieces of incense had fallen into the holes. In the case of the wooden ‘palace’, we are not looking at something erected at the very beginning. It replaced an alignment of stone pedestals which had probably supported standing stones (stelae?). Given the prominent symbolic role of wood-and-matting forms in Egyptian architecture (Figure 3.21, p. 153), the possibility should be kept in mind that these buildings were appropriate to a particular celebration and were not simply makeshift constructions from the temple’s first days.

The city proper (at least as it has survived) ended by the modern village of El-Hagg Qandil, 6 km from the northern end of the city, but this was still only about halfway along the line connecting the headlands which define the site of Amarna. A number of isolated royal enclosures were built on the desert to the south and east.[45] To the

modern eye they appear inconveniently located in arid settings. One wonders if they represent a pattern of subsidiary private places for individual members of the royal family which, at Memphis especially, would have been set within the fields and trees of the nearby countryside. The one that we know best was called *Maru-Aten* and a part of it, at least, was called a 'Shade of Ra' (often translated as 'Sunshade' and meaning a sun temple).[46] It consisted of two large, walled enclosures, in one of which the central feature was a shallow lake into which extended a stone causeway. Gardens had been laid out, within which were pavilions and a group of shrines, including one with platforms standing on an island surrounded by a shallow moat. A building with brick pillars, perhaps to support an open trellis roof, had contained a row of interlocking T-shaped basins intended to be filled with water, and was surrounded by a gypsum pavement decorated with painted panels showing plants, waterfowl and calves. A large number of wine jars was found stored in another building. The whole complex brings out a contrast in images. The essence of Akhetaten was a tract of pure desert, with the 'House of the Aten' on its edge. But much of the preferred imagery of art and texts in the Amarna Period invoked idyllic landscapes of greenery, water, birds and animals: the harshness of sun and desert set against the luxuriance of the papyrus marsh. Maru-Aten exemplified the contrast: an oasis of maintained fertility, set with shrines, walled off from the surrounding desert. It also exemplifies the wish for retreat, mentioned in the treatment of palaces in Chapter 6, and is symptomatic of the age in that a crucial part of it, the 'Shade of Ra' itself (and possibly the whole building), belonged to a leading royal lady. By the end of the Amarna Period the formal owner was the king's eldest daughter, Meritaten. In the same area, 1.25 km distant, lay another enclosure of a broadly similar nature, its modern name *Kom el-Nana*, identified as the 'Shade of Ra' (thus sun temple) of Nefertiti (see p. 331).[47] Its only partial excavation so far has uncovered a number of formal buildings, in mud brick and stone, as well as a bakery block, but so far nothing comparable to the pools and gardens of Maru-Aten.

Imagining the city at work

Akhenaten's interests were directed towards intellectual and ideological goals. Although political consequences came in their wake (in the end military leaders took over), and the creation of Amarna

may have disrupted the normal workings of administration, we are entitled to wonder whether he sought other changes, less obvious to us. We have many sources for the workings of society in the New Kingdom. At Amarna we possess a physical profile, a kind of giant theatre, of how they were played out on the ground during Akhenaten's reign, and can try to interpret the evidence accordingly.

The Central City was largely defined by three major royal buildings: the Great Palace on the west, and the 'House of the Aten' (Great Aten Temple) and the 'Mansion of the Aten' (Small Aten Temple) at the northern and southern ends on the east side of Royal Road. Between the two temples and running behind the Small Aten Temple was a large tract of desert occupied by groups of brick buildings, which were laid out with some regularity. In several different ways they served the king's administration and should be seen as parts of the palace (as broadly defined), although no architectural recognition was given to this essential unity of purpose.[48] No surrounding wall bound them together. They appear to be divided into two groups. One lay adjacent to the southern side of the Great Aten Temple enclosure. Closest was a huge bakery. It consisted of long ranges of narrow parallel chambers (Figure 8.11). Each chamber was a single baking unit, containing one or more circular ovens of standard domestic design at the back. Brick bins lined the walls. The number of baking chambers amounted to more than a hundred. Details of what went on inside are illustrated on a block originally from one of the Amarna stone buildings (Figure 8.11). From one side of a courtyard two chambers open. The curvature across the top of each implies a vaulted roof. In each chamber, a man tends an oven. Behind the one on the left, flat round loaves are stacked on a table; behind the other, the table bears instead long cylindrical bread-moulds. This reflects the two basic Egyptian baking methods: flat loaves baked on round mud trays, and tall narrow loaves baked inside cylindrical pottery moulds. Fragments from tens of thousands of such moulds are not only heaped on the desert behind the Great Aten Temple bakery, they seem largely to bury the baking chambers as well.[49]

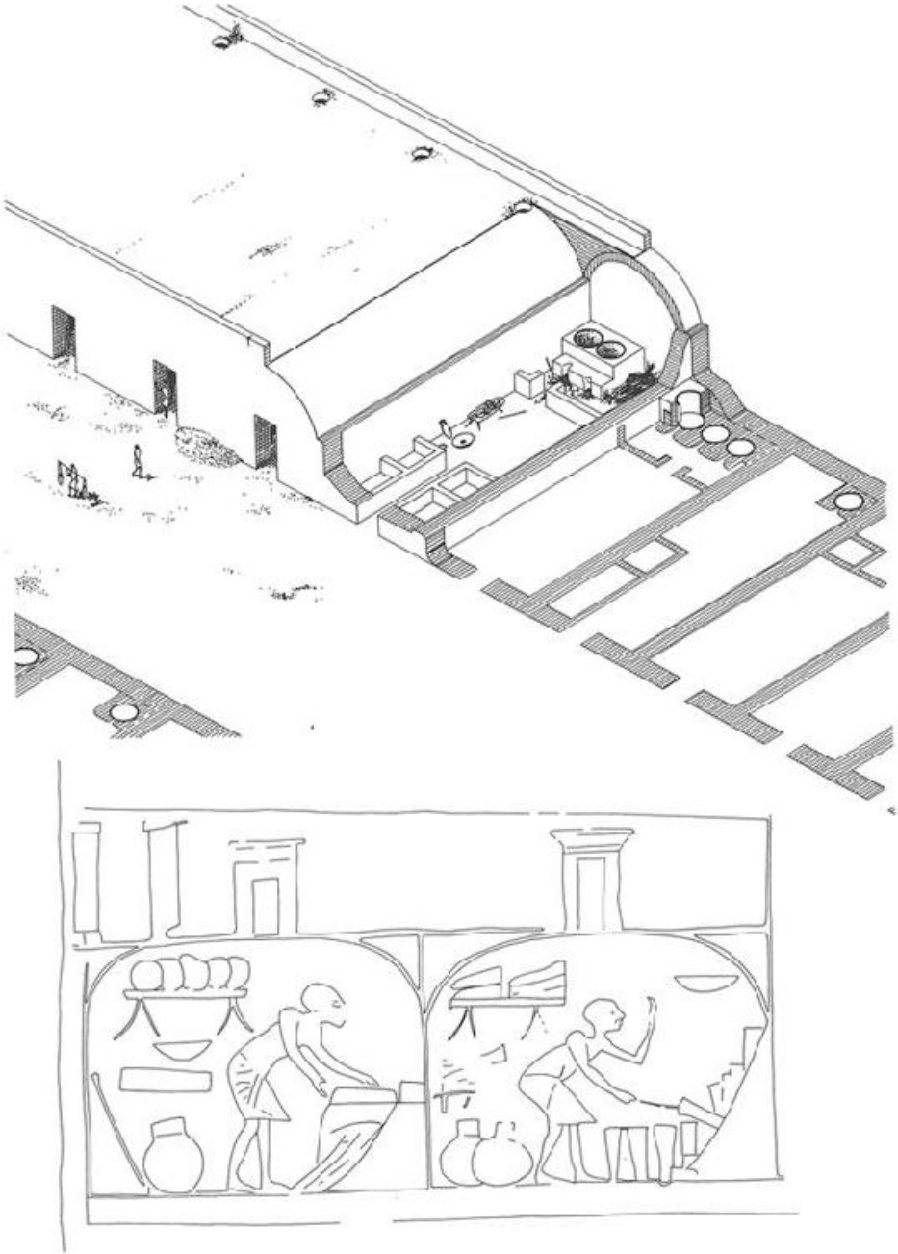


Figure 8.11 The temple bakeries in the Central City, a rare example of large-scale factory production though arranged in the form of repeated cellular units. The scene below, from a block originally part of an Amarna building but found reused at El-Ashmunein (Hermopolis), is after Cooney, *Amarna Reliefs*, 73.

The form of these bakeries is very revealing of the Egyptian approach to organization. Here was a major challenge: how to bake bread in industrial quantities? A modern approach might be to rethink the whole organization and to redesign the ovens, giving them larger

capacity, so that the ratio of loaves to manpower would be improved. This is the mentality of 'productivity' and 'efficiency'. The Egyptian solution was very different. It was simply a repetition of the basic domestic kitchen until the necessary capacity was obtained. This presumably involved a simple multiplication of the necessary number of people as well, subdivided into as many teams as there were chambers, each chamber under its overseer, and all working under the responsibility of an official. This seems also to be the system behind the bakery records from Memphis from the reign of Seti I, less than 50 years afterwards, which is discussed in Chapter 6 (pp. 279–80). There the responsibility for baking rested with the mayor of Memphis. It is worth noting that Amarna had its own mayor, too (the owner of tomb no. 13).[50] We can surmise that he was based in the 'Office of the Town of the Aten' (see below). This cellular approach to a large-scale operation offers a paradigm for the whole ancient system. It was a system based on a ready supply of cheap labour. This is why we can say that in organization the ancient Egyptians could be very effective, but we cannot say that they were efficient in the modern sense of the word. Pottery bread-moulds are easily recognizable. A study of the pottery recovered from the extensive excavations at Amarna reveals that they were rare in residential areas and common within and around bakeries attached to the two main temples (and also one within the enclosure of the 'Sunshade of Ra' of Nefertiti at Kom el-Nana). This helps to confirm that, by the New Kingdom, mould-baked loaves denoted festival occasions.[51]

Bread was an essential ingredient of life and component of offerings but what was most desired was meat, especially from cattle and from fowl (primarily geese). The offering-tables in the temple are shown in the contemporary pictures piled high with both (over a bottom layer of loaves). At the centre of the meat supply for the temple was a man who combined the offices of manager of the cattle and of the granaries of the Aten with that of 'first servant of the Aten'. The man we know who filled these offices was named Panehsy and, in addition to a large private residence to the south (and a large rock tomb, no. 6), he had a building beside the enclosure of the Great Aten Temple which looks like a house but must have served as his official place of work.[52] The debris in which the remains of this building were buried contained many bones of cattle (large, sturdy specimens to judge from their bones) and of birds, mostly geese but including common crane, teal, water rail, doves, quail, wading birds and a variety of perching birds. In all cases the main meat-bearing parts had been removed to leave

mainly wing and lower-leg bones, implying that whatever was captured in the large nets that the Egyptians used for fowling could be incorporated into 'offerings'.[53] Yet pictures of the temple show slaughtering of cattle being done in one or two enclosures within the temple precinct, and the actual remains of one seem to be present, located near the stela (or *benben*-stone) in front of the Sanctuary.[54] This implies that the cattle, at least, were led into the temple area, slaughtered and butchered in a designated location, and the extracted bones then taken outside the temple enclosure and dumped beside the manager's office. The seeming inconvenience of this pattern of movement is representative of the whole layout of the temple, with its multitude of offering-tables lying distant and walled off from where the offerings must have been prepared.

Not all of the meat for offerings was the result of on-site slaughtering and immediate presentation. When cut into joints, cured and dried it could be packed into pottery jars for storage or transportation. Amongst many ink labels originally written on the shoulders of such jars we find mentions of meat for 'the daily service' and also for the 'birthday of the Aten' (though how periodic this was we do not know).[55] The source of the meat might not have been Amarna, but a more distant establishment which sent its consignments to Amarna. A concentration of these labels in a building group south of the bakeries might indicate the location of a meat store.[56] Other pottery jars, often in a two-handled amphora shape, held a wide variety of other commodities. One was wine, which was commonly identified as to age and source by ink labels on the amphorae shoulders and related information stamped on the large mud stoppers that sealed the mouths of the vessels. The remains of wine jars are also amongst the material found in the precinct of the Great Aten Temple.[57]

It was a deeply embedded aspect of Egyptian society that temple 'offerings' were ultimately distributed as 'rations' to people who had been officially given this entitlement. An arrangement of this kind must explain a text from Akhenaten's early days at Karnak which recorded that the towns of Egypt, through their mayors and the royal domains, were obliged to pay an extra levy to support the staff of the Aten temple at Thebes, with one total giving the figure of 6,800 persons.[58] If the figure referred to men who were heads of their households, it could represent the bulk of the families of a city the size of Amarna. In their tomb chapels some of Akhenaten's senior officials recorded the king's promise of food benefit from the temple. 'I give

you the office specifically so that you may eat the provisions of Pharaoh, your lord, in the House of the Aten' is one example, made to Meryra on his appointment as 'chief of seers' in the Aten cult.[59] The fundamental expectation, at least of the official class, that their spirits would continue to receive offerings after death was also to be satisfied at Amarna, at least in part, through what was offered in the Great Aten Temple. The 'first servant of the Aten' and temple administrator Panehsy asks, in a text in his tomb, to receive offering-loaves 'on every festival of the living Aten in the Mansion of the Benben' (a synonym for all or part of the Great Aten Temple).[60] As mentioned above, in the myriad offering-tables at the Great Aten Temple, many of them outside the walls of the main stone building, we could have the physical evidence for this practice.

In what way does this aspect of Amarna clarify our understanding of how New Kingdom Egypt worked? On looking at the plans of the Central City an obvious contrast emerges with what we can see of the surroundings of large conventional temples. For the latter we have to rely largely upon Medinet Habu, the Ramesseum and the temple of Seti I at Abydos where we have plans of much of the enclosures which surrounded each of these stone temples. (With other major temples, of Ptah at Memphis, for example, or Karnak at Thebes or of Ra at Heliopolis, we know next to nothing about how the surrounding ground was filled during the New Kingdom and, in the case of Heliopolis, even what the temple of Ra looked like.) In these three cases the enclosure was packed with storage and administrative buildings (for the Ramesseum, see Figure 6.6, p. 259). The stone parts of the two main Aten temples at Amarna, however, stood surrounded or fronted by huge open spaces. The supply of offerings, requiring storage and production facilities, was primarily located in ground lying outside (though even here one should note that bakeries were not included within the precincts of conventional temples[61]). This change in how the ground inside the enclosure of the Great Aten Temple was used might, as suggested above, reflect a radical change in the policy of admittance: the space was at the disposal of the city's population in an experiment of inclusion.

The extensive buildings for the production and storage of food lay beside the Great Aten Temple and also across the road from the Great Palace. In this building, too, as we have seen, there were large halls and especially the great courtyard surrounded by statues of Akhenaten and his family. The whole ensemble was built to allow the king to appear before an audience, which was a large one to judge from the

scale of the surroundings. Whether such occasions were accompanied by feasting remains conjecture, but a reasonable one: feasting is something that courts across the Near and Middle East did over long periods of history.[62] The main food centre, in that case, was well placed to serve both the main temple and the main palace, perhaps implying a degree of integration between what was understood to be 'offerings' and what was delivered directly to the palace, although it would require written records to work out the details. In the case of the Great Aten Temple (Amarna's equivalent to the Karnak of his predecessors) we can develop the contrast, from architectural appearance to behaviour: exclusion versus inclusion, with public gratitude added to deference on a large scale. What Akhenaten offered his people was feasting on a bigger scale than ever (but probably no remittance from the ardours of conscripted labour; see below).

The other group of buildings beside and behind the Small Aten Temple was an unpretentious spread of offices intended to house the archives and officials of those departments which worked directly beneath the king. Some were designated according to the name of a senior official, in two cases 'royal scribes'. There was an 'Office of the Town of the Aten' (perhaps the base for the city's 'mayor', owner of one of the rock tombs). Another was the 'Bureau for the Correspondence of Pharaoh' (often called the 'Records Office' in modern writings).[63] Late in the nineteenth century AD, local villagers discovered inside it the hoard of clay tablets now known as the Amarna Letters (the archive of diplomatic correspondence briefly discussed in Chapter 6, pp. 280–2), which also contained material suggestive of a small international centre of literary study (Figure 6.15, p. 284). We know from labels stamped into the bricks that a further building in this group was called 'The House of Life'. By this term the Egyptians referred to an institution where texts of a serious nature (medicine, astronomy, etc.) were studied and copied, making it a library. It is noteworthy that Akhenaten did not dispense with this traditional centre of knowledge (and how one would love to have a copy of its catalogue), and excerpts from traditional pieces of literature have occasionally been found at Amarna.[64]

The running of the administration required the employment of many 'scribes' or junior officials (clerks, to use a somewhat old-fashioned term) whose job it would have been to write and receive reports and letters giving instructions, to keep accounts and lists of people, and to maintain archives of property ownership and transfer. They were allocated a separate village within this administrative zone,

five or so (it is not fully preserved) straight streets of small back-to-back buildings which, apart from lacking kitchens, have the room layouts of conventional houses.[65] We have a tendency, encouraged by the normal absence in archaeology of explicit sources, to expect the plans of buildings to reflect the way they were used. In particular, obvious houses are houses, whereas those with plans that are more difficult to resolve we can class as 'administrative' (or even 'cultic'). But sometimes the distinction fails. The 'first servant of the Aten' at Amarna, Panehsy, had two 'houses': one in the Main City, which, within its substantial estate, we see as the proper private residence for himself and his household; the other, beside the Great Aten Temple and surrounded by butchery waste, we see as his administrative base, his 'office'. So, in the Central City where we find groups of houses interspersed amongst buildings that we know really did contain administrative departments, we can feel more obliged to interpret them as scribes' offices. Hence the identification of the streets of 'houses' behind the Small Aten Temple.

The head of the king's administration in Egypt was the vizier (sometimes a dual post, with each vizier responsible for one half of the country). Amarna was the base for one of them. We have a large house (at the far southern end of the Main City) for a vizier named Nakht, and the beginnings of a decorated rock tomb for him which gives the impression, however, that, had it been completed, it would not have been particularly grand. Viziers, in effect, ran the country (we have detailed accounts of their responsibilities) and did so from their own court, with a protocol which included a formal procession each morning from their office to a part of the palace where they would greet the king and brief him on what was happening in the country, including matters of security.[66] The eastern half of the Central City would have been pre-eminently the vizier's territory, where the key offices of state were situated. The difficulty of being sure about the way in which buildings were used becomes acute at this point.

Beside the Small Aten Temple stood a large enclosure, 120 × 137 m, divided into three parts. One part was a large court planted with trees, another was an example of the magazine or warehouse block composed of many contiguous and parallel chambers. A picture in one of the rock tombs (no. 4, Meryra) depicts the contents of such a store in detail (a portion shown in Figure 6.5, *top*, p. 257). It might even be this particular one. The third part of the enclosure contained a version of a 'house' but sufficiently large and elaborate to suggest that it could

have been a palace (its modern name is the 'King's House').[67] Furnished with wall paintings of the royal family, a throne room and a likely Window of Appearance, the King's House is generally regarded as a secluded set of royal apartments. A bridge resting on brick piers and approached at each end by a ramp carried a broad corridor, its internal walls painted with further scenes of the royal family and probably gardens, between the King's House and the Great Palace. Whilst, in this way, it provided an extension of the king's realm, its location raises the possibility that it also provided the necessary court for Akhenaten's vizier, providing for the processional movement of king and vizier between their respective realms (Figure 8.5, (1) and (7), p. 332). When written sources are lacking, we have to rely upon inference for even major statements and identifications as to how society worked.

The scenes of the king's public life which dominate the decoration of the rock tombs give a conspicuous place to soldiery. Wherever the king goes we see contingents of Egyptian and foreign troops.[68] This is in keeping with the strong military profile of the New Kingdom. Yet, in the city layout, any military architecture is not obvious. The city remained without a surrounding wall and thus without the grand fortified gateways that, elsewhere and at other times, often marked city entrances. The North Riverside Palace looked from the outside like a great fortress, and in its outer parts we can perhaps detect the outlines of a barracks for the king's own bodyguard. But this is exceptional. What we do find on the far eastern edge of the Central City is a set of buildings evidently for a force of men and chariots, the horses kept in a set of stables with cobbled floors, mangers and tethering stones.[69] Outwardly, however, the buildings remained plain. We know from the rock tomb (no. 9) of the chief of the Medjay police, Mahu, that Akhetaten had a force of police equipped with chariots who were separate from the normal army and were responsible especially for security across the desert hinterland (and answered to the vizier).[70] There has to be a strong presumption that these buildings were the Medjay headquarters. A possible smaller police post, again without the architectural trappings of fortification, lay in the desert a short way behind the South Suburb.[71]

The essence of Akhetaten, the reason for its foundation, was to provide the Aten with a pure landscape over which it could rise each morning. The ideal had been compromised to a small extent by siting the cemeteries within it, as well as two workmen's villages although these were out of sight from the city. As a way of controlling access to

the adjacent desert an irregular network of tracks was laid out across it.[72] In part they provided straight routes between the city and the tombs; in part, they doubled as patrol roads and boundary lines that should not be crossed, the purpose being to keep people away from the central tract of desert and the place where the royal tombs were being prepared. It is likely that the Medjay police had the responsibility for enforcing a policy of exclusion, as seems to have been the case at western Thebes and the area of the Valley of the Kings.

Where the people lived

Much of the city began as a rapid informal colonization of the desert on either side of the Central City. Hasty decisions as to locations and routes of access quickly became fixed and shaped a city which, had Akhenaten's plans been more successful, would have lasted for generations. Even by the time Amarna was abandoned, the process of piecemeal replacement of houses by building the new over the foundations of the old had started, though keeping to the initial routes of access.

Although the city lacked uniformity of plan, its individual elements, its houses, reflected a common preference in layout, one which (fortunately for us) is relatively easy to comprehend and which allows us to distinguish one house from its neighbours (something not to be taken for granted on archaeological sites). Although it is rare to find two identical houses, the same elements are repeated in slightly different combinations and at different scales (Figures 8.12 and 8.13).[73] The main feature is a square, central living-room. Against one wall stood a low brick dais, where the owner and his wife would sit to receive guests. Against another wall was sometimes a plastered stone washing-place. In larger houses one or more wooden columns raised the ceiling sufficiently to allow windows to be inserted high up in one or more walls. In large houses, such windows took the form of stone grilles. Around the central room were grouped others: an outer reception room, storage rooms and more personal domestic quarters. A principal bedroom served the owner, in which a wooden single bed stood at the back in a raised alcove. Beside it, ideally, was a bathroom and lavatory. The disposal of personal waste, however, was of the simplest kind. It was collected in a vessel and carried outside for disposal. There is no trace of a public drainage system within the city,

or of a general water supply, which went beyond servants struggling to carry loads of water from sources (wells and the River Nile) to houses.

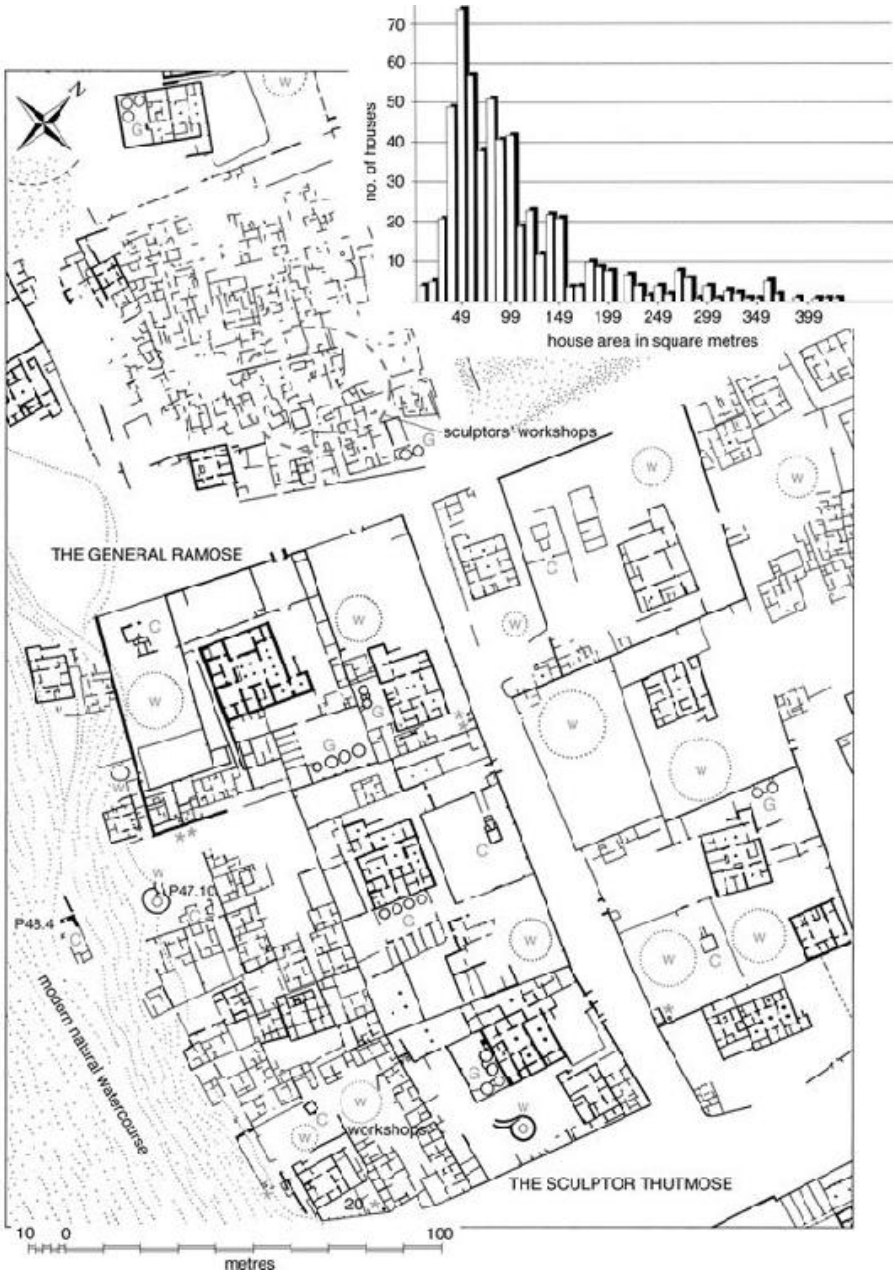


*Figure 8.12*Plan of a characteristic part of a residential area at Amarna, in the Main City. The painted bust of Nefertiti was found in the house of a sculptor, whose name may have been Thutmose. The key to the letters on the plan is: 'W': well; 'C': chapel; 'G': granary. The sign '*' indicates the probable presence of a pottery kiln. The 'sculptors' workshops' are those of house groups O47.16a and 20. Figure 8.13 is

based on part of this map. *Inset*. Bar-chart showing the frequencies of houses of varying size within the Main City. House sizes are grouped in steps of 10 sq. m. After Piers Crocker, unpublished dissertation, University of Cambridge, and see *JEA* 71 (1985), 52–65.

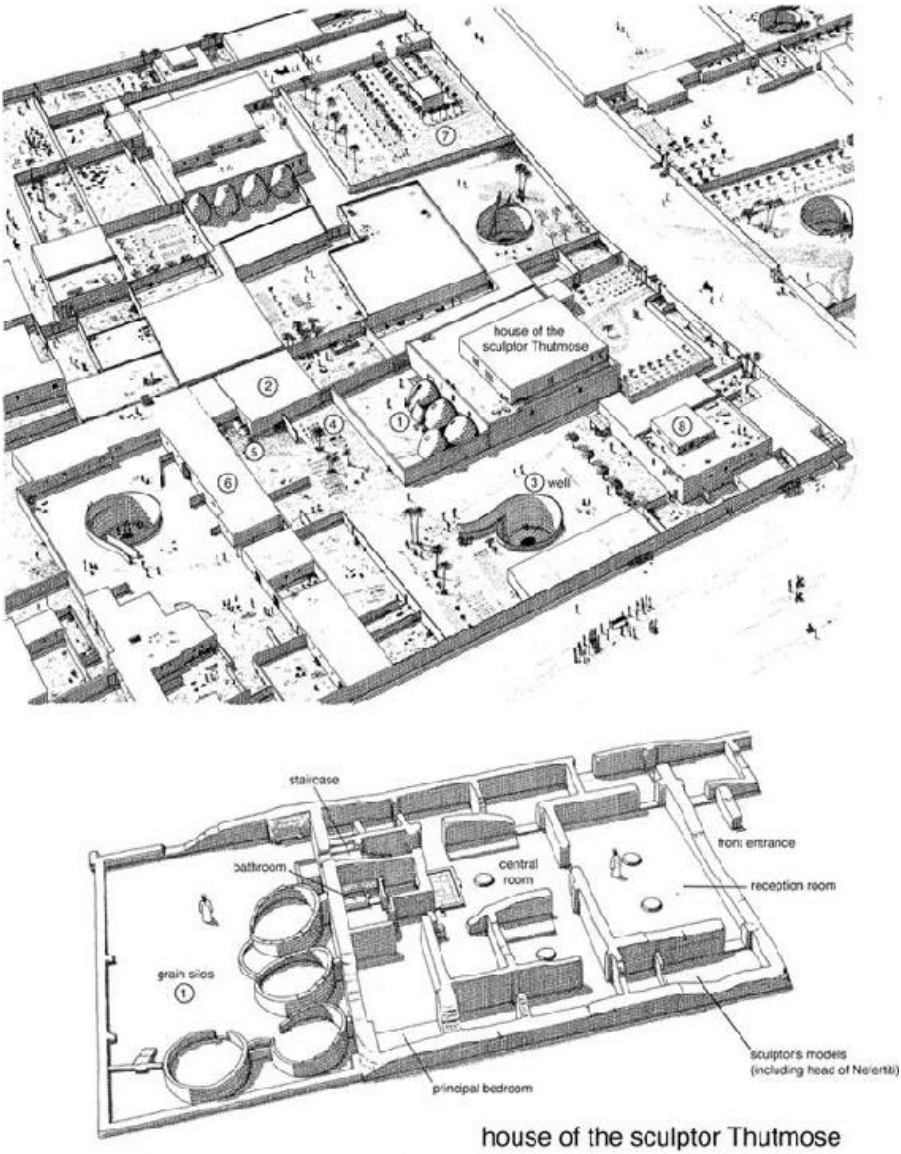


*Figure 8.13*Perspective reconstruction of part of the area of Figure 8.12. The house of Thutmose is shown in the condition in which it was found when excavated in 1912. The numbers in circles are explained in the text, pp. 352–6.

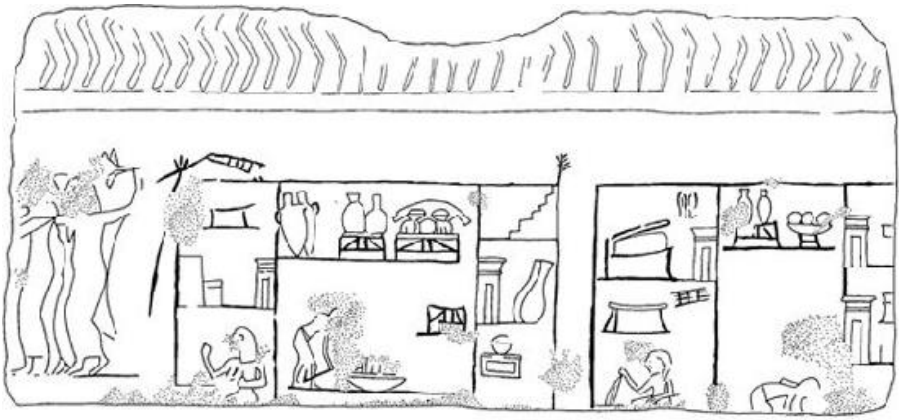
Possessing a title in ancient Egypt was an important mark of

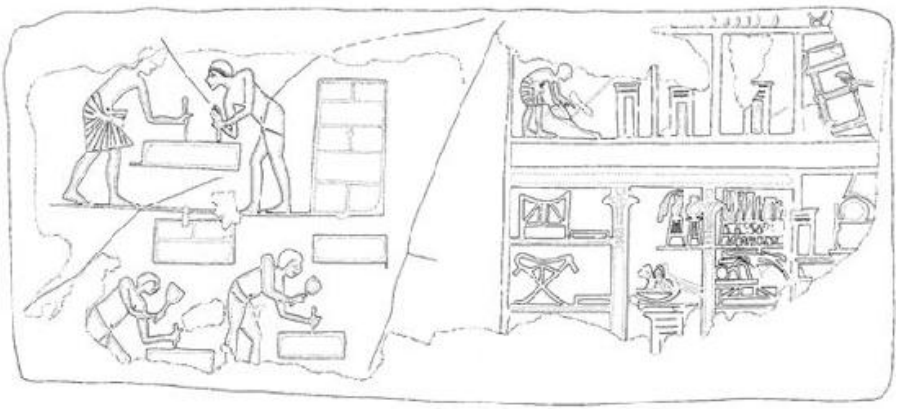
success as well as of identity. One place to display this, along with your name, was on the door frame of your house. Preferably this was of limestone with carved and painted hieroglyphs, but it could be of wood. For larger houses the main door, with its decorated frame, drew attention also by being set in a small projecting room and at the top of a very shallow flight of brick steps. From this entrance porch and a vestibule beyond you entered a long reception room. A doorway in the middle of one of the long sides gave access to the central hall. This internal doorway, which could be of double width, offered scope for an even more prominent display of the owner's situation in life than his front door. On a carved and painted door frame he could be shown paying respect to the king and to the Aten, and presenting himself through prayers and epithets more or less identical to thosehe would inscribe in his tomb. As the patrician head of a household he would be already entitled to the deference of an ancestor-to-be possessed of an aura of enhanced respect, in effect, of divinity.

As far as we can tell, houses bore only limited decoration. Mud-brick walls were almost invariably covered with a layer of plaster made from mud mixed with chopped plant material. When uncovered by excavation it is common to find that most of it has crumbled away. Sufficient has been found, however, to show that, outside and inside, plaster surfaces were mostly not decorated, even by whitening. Plain mud was the dominant surface, even within the larger houses of officials. It gave way to colour in two main areas. Set into some of the wall surfaces of the front reception room and the central hall of the larger houses were shallow niches meant to resemble doors. The rear surface was normally painted red, to simulate wood, and side and top panels were painted with designs that included, in hieroglyphs, short prayers and the names and titles of the owner. The other area given coloured treatment was a zone below the ceiling and the ceiling itself. A deep band of plain white towards the top of the walls was set off with bands of coloured decoration and sometimes semicircular panels painted with designs that included plants and suspended wildfowl.[74] The wooden beams which supported the ceiling were encased in mud plaster and often painted pink though the intervening spaces were white. Wooden surfaces, both door panels and column shafts, were painted red. The overall effect was one of contrast between the muted surfaces of mud plaster and areas of bright intrusions. Wall decoration was also one way by which the surroundings in which the royal family lived differed from those of everyone else. Where the mud-brick walls of palaces have been preserved they have often revealed that

paintings, of nature and the life of the royal family, covered large areas, sometimes, in the case of nature scenes, extending across floors of painted lime-gypsum (Figure 6.14, *Right*, p. 281).

One problem faces archaeologists everywhere. If we find only the ruins of a building, how can we tell if it had more than one floor or storey? It was long accepted that Amarna houses were primarily single-storeyed. The windows beneath the raised ceilings of the central room guarantee this for at least one or two of its sides. Many houses, however, also possessed an internal staircase. It could have led just to the roof, a useful area for storage and summer sleeping. There are good reasons, however (including smaller stone column bases found fallen to the ground floor), for thinking that upper rooms often covered large parts of the house, something supported by a few ancient pictures (Figure 8.14).[75]





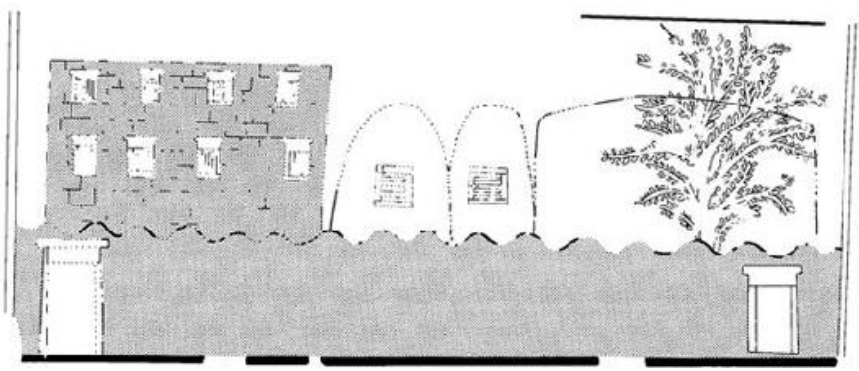


*Figure 8.14*Three ancient views of houses. *Top*. Two houses depicted on a block originally part of an Amarna building but found reused at El-Ashmunein (Hermopolis). They appear to stand beside the river. A pottery bowl in which charcoal could be burnt is in the central room of the left-hand house. A bed with a thick mattress is in the top-left corner of the right-hand house. After Cooney, *Amarna Reliefs*, 74. *Middle*. Block originally from an Amarna building. On the right is what appears to be a picture of a house. In its top-left corner grinding is being done at a quern emplacement; in its top-right corner is part of a vertical loom. The left half of the block shows masons working out of doors on stone blocks. The block is in the Malawi Museum in Egypt. After B.J. Kemp and G. Vogelsang-Eastwood, *The Ancient Textile Industry at Amarna*, London, 2001, EES, 338, Fig. 9.22. *Bottom*. A

multi-storey house in its grounds, surrounded by an enclosure wall with a wavy finish to the top. Two grain silos and the roof of another building are visible above the wall, along with a tree. Although not from Amarna, its portrayal of a multi-storey house in a walled garden provided with granaries closely matches the appearance of the larger Amarna houses. From the tomb of Anena (no. 81 at Thebes), early Eighteenth Dynasty, after N. de G. Davies, *Scenes from Some Theban Tombs (nos 38, 66, 162, with Excerpts from 81)*, Oxford, GI, 1963, Pl. XXIII.

The ideal larger house – built for 'officials' – stood within its own grounds, surrounded by a wall which could reach at least 3 m in height, its main entrance marked by a pair of low projecting walls which guided chariots in at right angles and gave some protection to a person emerging from the gate into the street. The loose arrangement of elements in the compounds stands in marked contrast to their carefully prearranged place in the formal Middle Kingdom layouts discussed in Chapter 5 and exemplified at Kahun. Many details of usage are still not clear but the general outline is tolerably so. The list of basic elements (marked on Figure 8.13, p. 351, house of the sculptor Thutmose) is as follows:

1. Granaries: up to a certain individual capacity they were tall, circular constructions of brick, in diameter about 2.5 m and with domed tops (Photograph 8.2). The principal grains were emmer wheat and barley, poured in at the top from someone standing on a short flight of steps, and withdrawn through a trap-door at the bottom. However, over a certain size they were replaced by long vaulted rooms of the 'magazine' kind. Then, since other commodities were stored in them as well, it becomes much more hazardous to estimate stored grain capacity. The farm-centre aspect of Amarna is well documented, for the larger houses look like little farms, and in so doing both reflect the commodity-based nature of the Egyptian economy, and at the same time make an important contribution to the debate about private economics in New Kingdom Egypt. We can estimate that the capacity of an average silo not filled to its entire capacity was about 9,500 litres, equivalent in ancient terms to about 125 *khar* of emmer wheat. At the Theban necropolis Workmen's Village of Deir el-Medina a skilled artisan's annual wage for his family included a maximum of 48 *khar* of emmer, whilst the foreman received 66. For guards and porters, the annual rate was 24 and 12. The payments in barley seem to have been about a third. Thus two or three of these silos, a not uncommon number in the Amarna house compounds, would appear to suffice a family with a purchasing power

somewhat larger than a Deir el-Medina foreman's. However, the Deir el-Medina householders did not have large silos in which to store their grain. They were paid monthly and evidently consumed most of it rapidly, either as food or as a medium of exchange. They did not accumulate grain balances. To be able to do that was a significant mark of status. The groups of silos at Amarna thus indicate two possibilities (as alternatives or present together): either storage of an annual harvest, or a monthly receipt of ration payments far in excess of basic needs. We know, from many sources from the New Kingdom and earlier (the Wilbour Papyrus and Hekanakht's letters are examples, pp. 253 and 311–12), that it was both an ideal and common practice for individuals with an official title to own or to rent land that often comprised plots that were scattered and not necessarily adjacent to the main place of residence. This gave them a degree of independence from the largesse of the court and made them, as patrician heads of households, the focus of local deference. The good life of the successful official is one subject of scribal manuals:

> You go down to your ship of fir-wood manned from bow to stern. You reach your beautiful villa, the one you have built for yourself. Your mouth is full of wine and beer, of bread, meat and cakes. Oxen are slaughtered and wine is opened, and melodious singing is before you. Your chief anointer anoints (you) with ointment of gum. Your manager of cultivated lands bears garlands. Your chief fowler brings ducks, your fisherman brings fish. Your ship has returned from Syria laden with all manner of good things. Your byre is full of calves, your weavers flourish. You are established whilst (your) enemy is fallen, and the one who spoke against you is no more.[76]

The villa could be in the country, but the larger Amarna houses seem designed to accommodate just this kind of life. The emphasis on the self-made aspect of the official is notable. No hint here of the good life being handed down from the king in return for loyal service.

*Photograph 8.2*Private wealth: the bases of circular brick silos or granaries in a private estate at Amarna, house U24.1, looking north-east. The diameter of each silo is *c*. 3.5 m. By courtesy of the Egypt Exploration Society.

2. Animal byres: generally identified as sheds with roof supported on several square brick pillars. In one house (no. Q44.1), however, a narrower building, not requiring roof supports, housed a line of eight neatly made mud-brick feeding-troughs, presumably for cattle.[77] One occasion for slaughter was probably a funeral feast for a member of the family but held on the premises of the Great Aten Temple.
3. A well dug in two stages, the upper part a wide basin containing spiralling steps which led down to a shaft descending to the water table. A damaged scene in the tomb of Meryra (tomb no. 4) appears to show a water-lifting hoist (a *shaduf*) somehow erected as part of a large well in a royal garden.[78] The water, being mildly

salty, may have been less suitable for human drinking than water carried to the house from the Nile. Groups of smaller houses were served by similar wells in public spaces.

4. A garden, presumably for both vegetables and flowers, and planted with trees, the roots of which are sometimes preserved within pits which had been filled with fertile soil. If the owner followed good practice, the gardens were laid out as grids of growing-beds measuring one cubit square, a practice going back to the Old Kingdom (Figure 0.3, p. 16).
5. Kitchens: always outside when the house stood in its own grounds, they often lay at the southern end of the enclosure, downwind of the prevailing north wind, which reduced nuisance from smoke (except to neighbours). They were simple affairs: small groups of circular clay ovens used primarily for baking bread although bronze basins could also be placed over the open top to enable cooking by boiling. Circular ovens could be supplemented by open fireplaces. Bread and beer remained central to the Egyptian diet. Quern stones and sometimes their mud-brick emplacements (little changed since the Middle Kingdom, Figure 4.4, p. 174) are a common find during excavation and show that unprocessed grain was an important raw material (as it was at Deir el-Medina) as distinct from loaves baked in distant bakeries.
6. Walled spaces (some roofed and some open) of uncertain purpose, though in some cases they were used for craft activities (the category also overlaps with spaces where animals could have been kept). Sculptors, whose debris archaeologists can easily identify, are one group whose workshops were in and beside their house compounds, the most famous being that (ascribed to a sculptor named Thutmose) where the painted bust of Nefertiti was discovered in 1912.[79] Linen cloth, glass ornaments, faience jewellery, pottery, inlays and coloured tiles in faience intended for the decoration of the main stone buildings of Amarna, wooden coffins and wooden furniture covered with gold leaf; all these things were made amongst the places where the makers lived. It is a reasonable guess that a proportion of the finds from Tutankhamun's tomb in the Valley of the Kings was made in backyard workshops in Amarna's suburbs (tiny flakes of gold leaf are not rare finds). The excavation of a sample of small houses in 2004 and 2005 brought to light evidence that, alongside other industries, scrap bronze was being melted down, the evidence being of a kind (tiny pieces of cut bronze and sherds from coarse

pottery crucibles) that earlier excavations would not have registered.[80] Where heat was required, this was supplied either by ovens indistinguishable from those used for bread or by small, easily made (and then easily destroyed and lost) fire pits in which temperatures sufficient to melt bronze could be reached by the use of bellows and charcoal. The city incorporated within its myriad houses and small courtyards the manufacturing capacity of a huge factory.

7. A shrine, which in the houses of some of the richest men (but by no means all, the sculptor Thutmose lacking one) stood in its own enclosure which could, in the largest examples, also contain an ornamental lake, a garden and separate pylon entrance to the street. With one exception (a house in the North Suburb modelled as a tiny Aten temple with offering-tables) they contained statues and/or stelae depicting the king and members of his family (Figure 8.2, p. 326, is one example).[81]
8. Separate accommodation, including a porter's lodge at the gate, but most importantly a completely separate house. It remains uncertain who occupied this house: a steward, a married son, servants?

Houses of rich and poor are distinguished more by size than by design, although larger houses generally gained greater privacy for the occupants by standing within a walled enclosure containing some or all of the features just described. If we take the size of a person's house as even a rough-and-ready measure of his status, the spread of house sizes provides a general profile of the kind of society we are dealing with. An easy way to view the whole mass of data is in tabular form (Figure 8.12 *inset*, p. 350). Although there are some jumps and gaps the overall pattern of the data fits a single curve in which, beyond a point of very basic housing, ever-larger houses grow steadily rarer. There are no obvious breaks or plateaux. If we remember that this was a time of great national prosperity, the gulf between rich and poor in this respect was not as great as we might expect. The rich and powerful lived in large houses, not in palaces. The great gulf was between the king and everyone else. If we added royal palaces to Figure 8.12 *inset*, they would be off the edge of the page.

The diagram of house size presents a gradient rather than one or more steps. Very different is the picture of the resources which people allocated to their places of burial and memorial. This reveals a major divide in attitude as much as in wealth. Several cemeteries laid out on

relatively flat ground have been discovered at Amarna and excavated since 2006.[82] Burial (mostly without mummification) was normally within a pit dug into sand or gravel to a depth of no more than about 1.5 m. The pits were body-sized or made a little wider to accommodate a few grave goods, mostly pottery containing food offerings, or sometimes more than one body. Once backfilled with sand they were marked on the surface with a low pile of rough stones. Small limestone markers, some originally with a scene of the deceased and favouring a triangular top, were fixed in place with a little mortar (Figure 8.15). To accomplish a burial of this kind represented the labour of probably a single day (although in a few cases a decorated wooden coffin had been purchased to which varying degrees of skill had been applied). The density of burials in sample excavated areas suggests, by extrapolation across the full extent of the cemeteries, a figure of at least 10,000 individuals who had died and been buried at Amarna.[83]

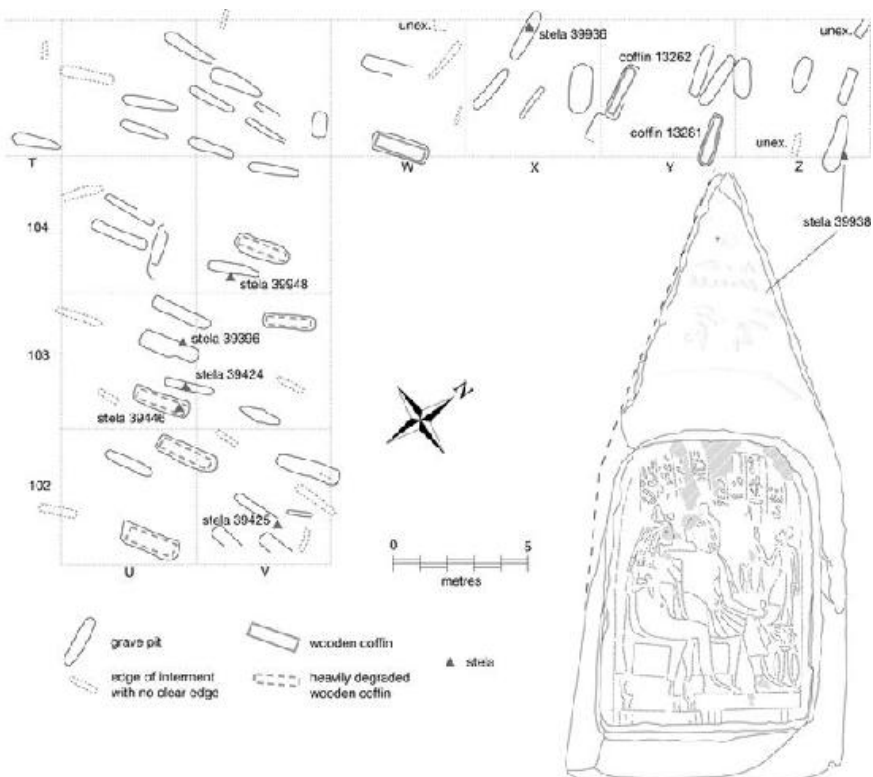


*Figure 8.15*Grave marker (object no. 39938) from the South Tombs Cemetery carved in a small slab of limestone and considerably weathered. It was set within a larger limestone frame with a pointed top. The height of the stela and its surround is 66 cm, and of the stela itself is 26 cm. The plan of excavated graves is the portion of the cemetery where the stela was discovered, in square Z105, in a robbers' pit. Note the

absence of a common orientation for the graves. Those on the left are aligned down the slope of the ground, whilst those on the right are on the almost flat valley floor, and were probably aligned according to paths of access. See A. Stevens, *JEA* 96 (2010), 11, Fig. 5, 15.

Akhenaten included the upper section of his society in the scheme announced in the Boundary Stelae, comprising categories of priests ('Chiefs of Seers', 'God's Fathers' and a third that is illegible). They were to be allowed to make their tombs in the 'eastern mountain'. Two separate groups materialized, the North Tombs and the South Tombs, and their owners represent a broader sample of 'professions' than the priestly, including the Chief of Police of Akhetaten, Mahu (tomb no. 9). As tombs, they served as places of burial, of memorial where an offering-cult could be performed in a shrine containing a rock-cut statue of the owner (and maybe his wife as well), and of advertisement of the owner's success in life. The number of rock tombs, however, falls well below the number of officials who, so we can estimate, lived in the city. For one means of estimation we can select the smallest house known to have been occupied by an official, N49.18, of the chariotry officer Ranefer. We can then assume that all houses of this size and above are likely to have belonged to men with official titles. They actually number 65. The excavated housing zones represent something like two-thirds of the total likely residential area, so that we must think in terms of around 100 as at least an order of magnitude for officials of more than modest rank. Some of them, of course, would have been 'replaced' through death during the 17 years or so of the city's occupancy.

Nearly all the tombs at Amarna remained unfinished when the city was abandoned. Starts had, however, been made on at least 43. They varied a good deal in size and elaboration, reflecting both the varying status and resources of their owners and how much expenditure they were willing to undertake (and perhaps how much assistance they received from the king). Despite their unfinished condition we can still draw one subdivision: between those intended to have an internal columned hall (or more than one), and those which were not. We have 16 of the former, 20 of the latter, and 7 where we cannot tell. The pattern of ownership of the two groups reflects what we might expect. People who, by their position, we would expect to be important have tombs in the former category, with the columned hall. They include the vizier Nakht(pa-aten), the mayor of Akhetaten Neferkheperu-her-sekheper, the 'chief of seers' Meryra, the 'first servant of the Aten' Panehsy, the personal stewards of Nefertiti and of

the queen mother Tiy (Meryra II and Huya, respectively), the chamberlain Tutu (who may well have been in charge of correspondence with foreign powers and client rulers in western Asia), and the chariotry officer and god's father Ay (subsequently to become king). Although the tomb of the vizier Nakht is in this group, in its unfinished state it still seems to represent the smallest of them. As for the group without columns, whilst some were still intended for men of high position, others, even though unfinished, were designed to be quite small. One of them (no. 1a), left undecorated, preserves a name on the lintel of its well-carved doorway, Rudu, but without a title.[84] If we take this at face value, it would imply that Rudu was the owner of one of the smaller houses in the city, yet someone with the capacity to undertake stone cutting of reasonable quality (was he himself a stone cutter?). His tomb also implies that there was no prohibition against men who were not officials making a rock tomb for themselves if they could manage it.

A total of 43 rock tombs is obviously less than the number of officials who had houses at Amarna. Furthermore, the number of those who were established early enough to see much progress made on their tombs was smaller still, around 25 at the most. Nor is there a close match between the known owners of houses and the named owners of rock tombs (tomb no. 16, we should note, was one of the largest but the owner had chosen to wait until more of the cutting had been finished before starting the decoration, and had had no time to have even his name carved on the doorway so that the tomb remains anonymous). No rock tomb is known for the sculptor Thutmose, for example, even though his sculpting career extended through at least part of the reign of Akhenaten. The absence of a tomb for the chariotry officer Ranefer is more easily understood. He was either a late arrival or a case of promotion, for he built his house over the foundations of a smaller and earlier one, and honoured in its carvings not Akhenaten but his successor, King Ankh-kheperura (Smenkhkara).[85] He would have had insufficient time in which to organize the making of a rock tomb.

The imbalance between numbers of officials and numbers of rock tombs can, in part, be explained by a provincial home for a proportion of officials exerting a stronger attraction than Amarna in choosing the location for the new family tomb. We can find an example of how this could work at the site of Sidmant el-Gebel (Sedment), the cemetery for the city of Herakleopolis. Several New Kingdom tombs excavated last century provided evidence of who their owners were.[86] Some were

people who were prominent in local society, which in practice meant the staff of the local temple. We have an Amenhetep, who was a priest of the local god Heryshef, and an Amenemhat, who was a god's father in the same cult. There is also a record of a mayor called Menena. The remainder, however, were officials of the court or the army: Nebenkemt (chief of bowmen and fan-bearer on the royal boat Khaem-maat), Seti (general, overseer of attendants of the Lord of the Two Lands, ambassador in all lands), Pahemneter (deputy commander of chariotry, chief of bowmen), and Rahetep and Parahetep (viziers), and possibly an earlier vizier called Thutmose. These are just the ranks of officials whom we find at Amarna and could probably have been found at Thebes, Memphis, and later at Per-Rameses but who, in this case, preferred to be buried close to what we must assume was their original home rather than in the cemetery which served the current capital. A person was not, it seems, forced to make his tomb at the capital just because he was prominent at court.

Amarna itself provides a good example of the provincial connections of a prominent individual, Ay, who was to become king after Tutankhamun and who was able to have made what would have been (if it had been finished) the finest tomb at Amarna (no. 25). A strong case can be made for regarding Ay as a member of a prominent family whose home was the city Akhmim, in Upper Egypt. His parents would have been a couple, Yuya and Tuyu, whose tomb was made in the Valley of the Kings. They had earned this honour because their daughter had married Amenhetep III and had become his principal wife, Queen Tiy (Akhenaten's mother). Typically for this as for other periods, the family had leading positions in the local Akhmim temple and in the army. Ay himself acquired army titles. When he finally became king, he was able to make an impressive gesture towards Akhmim, having a small rock-cut temple hewn in the cliffs behind the city.[87] This is symptomatic of another aspect of New Kingdom Egypt. As pointed out in Chapter 6 (p. 264) for many provincial towns or cities this was the first chance to possess a prestigious stone-built temple. Embellishing it or adding to its lands provided important people with an opportunity for munificence to their home town, recorded in a dignified way for posterity.

One might also wonder if the making of a rock tomb (which could take years and risk remaining unfinished) was a long-term commitment (to expenditure and the effort of finding the right craftsmen at the right time) that did not appeal to all households even if they had the resources to start one (and they might have started one

somewhere else before they moved to Amarna). But then, supposing a head of household died at Amarna without a rock tomb ready to receive him, what would the relatives have done – transported the body to a family tomb elsewhere? Another category of persons not easily accounted for in the known cemeteries is that of palace occupants, many of them women (some would have been foreign), who attended the predominantly female royal family. Despite their apparently privileged status did a lack of personal property and of family resources mean that their burials are lost to us amidst the mass of graves in the general cemeteries?

The picture we seem to have is that most people at Amarna centred their lives on where they lived, giving priority to their houses and domestic comforts, whilst making little or no provision for death. When it came, families followed a routine which required them to make immediate payments – for the grave-digger, linen wrappings for the unmummified body, a feast probably, perhaps a stonemason to make a small grave marker – but did not involve them in recurrent expenditures. For men of high standing, however, the option was there of embarking on years of expenditure and organization to create not only a secure place of burial, but a personal monument, knowing that it might not be completed in time. It seems to have attracted mixed levels of commitment.

Who lived at Amarna? The easiest to identify are the officials, who were representatives of that broad category whose lives weave their way through Egyptian history from beginning to end. Unfortunately, when the city was abandoned, it would seem either that most people took their door frames – expensive fittings – with them, or that termites have thoroughly consumed wooden versions, so that only rarely do we know who lived where. The most important was the vizier Nakht, with a particularly large house with extra columned halls. We have the houses of two senior figures in the cult of the Aten, Panehsy and Pawah. Military officers had houses scattered through the city: Ranefer, a chief charioteer, owned a quite modest house on a corner in a neighbourhood of small houses or workshops; a commander of troops, Ramose, had a somewhat larger house a few streets away from the sculptor Thutmose (see Figures 8.12 and 8.13, pp. 350 and 351). The latter's studio, close to his house, lay in a part of the Main City where other sculptors lived and had their workshops. Thutmose's workshops were simple courtyards with separate working spaces built against the walls. When the city was abandoned, unfinished sculptures and pieces used as models were left lying about

or were packed away in the sculptor's house. One such piece was the famous painted head of Queen Nefertiti. The owners of two more houses must have been involved in Akhenaten's construction works. One, an overseer of builders, Maa-nakhtuef, had an unpretentious house in the Main City. Away in the north, in the North Suburb, the handsome painted door lintel (from the doorway between the reception room and the central hall) of an overseer of works, Hatiay, owed its good state of preservation to the fact that it had been left in place and then fallen face downwards and been buried in rubble after the city had been abandoned.[88] Such examples of individuality are, however, exceptional. The city remains for us generally an anonymous place.

How many people lived in the city? One way of attempting an answer is to estimate the likely number of houses in the city and to multiply that by an estimate of household sizes. For the first, it is necessary to allow for the widely varying density of housing that is visible across the excavated parts of the city, and then to apply the result to an estimate of how much of the city remains unexcavated.[89] Density within the Main City varies between *c*. 50 and 110 houses within a 200m modern survey square, and minimum and maximum estimates give the Main City an original area equivalent to between 44 and 54 of these squares. If we assume that half the area had a housing density of 50 per square, a quarter at 80 and a quarter at 110, then the number of houses (thus households) in the Main City would have been between 3,190 and 3,915. Estimates for the North Suburb and North City are 550 and 105, respectively, thus a total for the full city of between 3,845 and 4,570 households.

We can gain a snapshot of households from fragments of census lists from Deir el-Medina from late in the Twentieth Dynasty.[90] They represent more than one list (perhaps five or six) spread across several years (30 to 40 have been suggested, with some households appearing in more than one fragment). They are summarized in Figure 8.16. Although we are accustomed to say that the inhabitants of Deir el-Medina were workers and craftsmen engaged in making the tombs in the Valley of the Kings, the men had occupational titles, but these are not recorded in these lists although their names and the names of their parents are. What makes the lists particularly interesting is the small size of many of the households. Amongst the 59 households for which the records seem to be complete, 54 per cent had no more than one child (11 of the houses were registered as being occupied by single men). Is this a result of low fertility and high infant mortality?

Detailed studies of early modern societies reveal underlying population dynamics that are quite complicated and which caution against taking one set of figures at face value; on the other hand, we should make the best of such information that we have. One sign that we can treat the lists with some confidence is that there is a rough balance between the number of males and the number of females: 91 as against 85 (omitting uncertain examples). We can note, however, the absence of lone-mother households (true also for the list of inhabitants of western Thebes mentioned below, p. 363. Were widows who did not remarry normally incorporated into the families of others, though the lists offer few possible cases?) Two ostraca from Deir el-Medina give similar household information, but list six and seven persons (six daughters in one, with a single male parent, and three sons and two daughters in the other). We should recall the changes in the size of the Kahun household (Figure 5.13, p. 220), from six, increasing to nine and then decreasing to three. The range of sizes of houses at Deir el-Medina corresponds to that for a large section of Amarna houses. If we apply the Deir el-Medina range of household size to Amarna the result is 9,984–12,253 for the Main City and 12,034–14,304 for all areas occupied by houses.

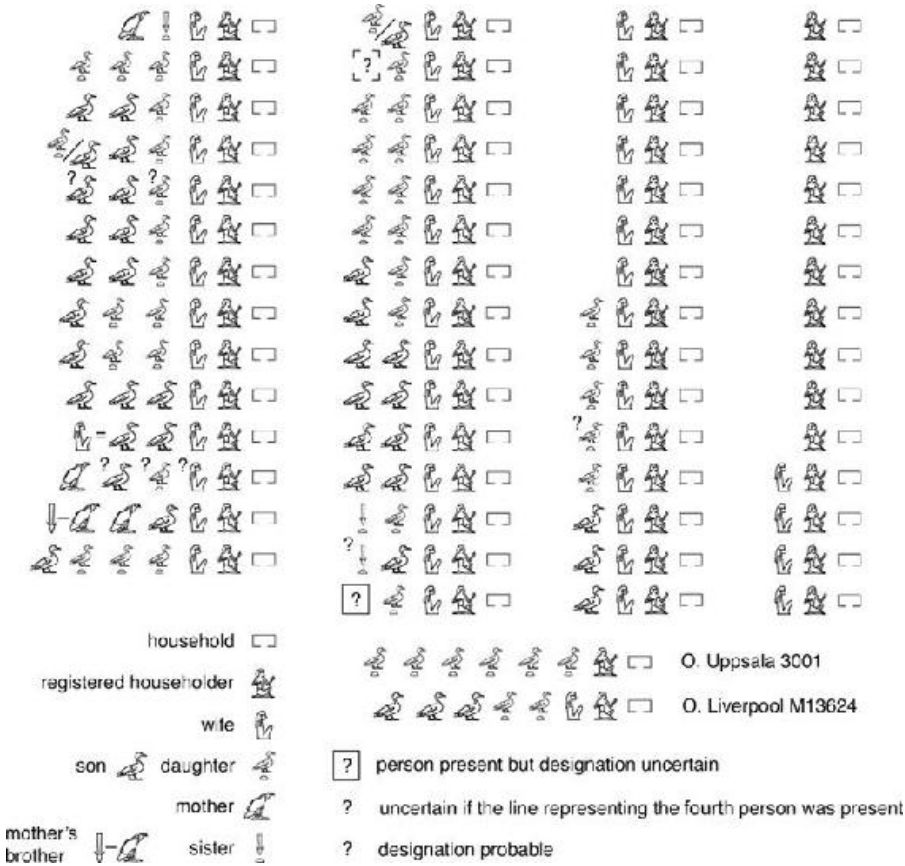


*Figure 8.16*Members of households at Deir el-Medina, as registered in fragments of census lists and presented in hieroglyphic transcriptions of the original hieratic entries. The fragments derive from perhaps five or six lists covering a period of between 30 and 40 years but are here conflated into a single list of 59 households. The lists from two ostraca from Deir el-Medina (in collections in Uppsala and Liverpool) appear beneath. The percentage of households according to the numbers of members present in the 59 households are as follows: 1 (18.6 per cent); 2 (18.6 per cent); 3 (16.9 per cent); 4 (23.7 per cent); 5 (20.3 per cent); 6 (1.7 per cent). After Demarée and Valbelle, *Les registres*.

A significant unknown is the size of a serving population that lay outside the scope of households. No slaves are recognized in the Deir el-Medina census lists. Yet it is known that people who appear to have been of relatively low status in the New Kingdom (servants, traders, Deir el-Medina inhabitants) nevertheless owned them (e.g. 'the servant Shedbeg' in the tomb robbery papyri, p. 304). At Deir el-Medina itself the state also provided a 'pool' of female slaves (numbering at least six and possibly up to 16) who seem to have been regularly available for individual days of household duties up to every third day.[91] We have no basis for estimating their numbers at Amarna,

and have to guess that they lived in the houses to which they were attached, perhaps without their own allocated space (but where would a 'pool' of slaves have lived, supposing the practice existed at Amarna?). Would they have been an additional 5 per cent of the population? We should also assume that the main palaces had their own permanent resident populations of slaves, servants and attendants, female and male. In the plan of the North Palace, completely preserved and excavated, we can recognize areas probably reserved for such persons though we can only guess the number: 200 (and, say, 1,000 for all of these separate palace establishments)? Following these lines of argument, we can arrive at a total population for Amarna of between 13,635 and 16,019 (for which a rounding up of 20,000 appears in order). This does seem at first sight to be intuitively low, but the basis of our intuition is experience from later societies with generally larger populations.

Clarity often comes from comparison. The comparison – contrast rather – between Kahun of the Middle Kingdom and Amarna (pp. 216–17) tells us something about the society of the two periods. For the New Kingdom, an intriguing basis for comparison is the combined written and archaeological record of western Thebes from the end of the New Kingdom, thus around three centuries after the end of the Amarna Period. Life will have moved on, but not necessarily to so great an extent. A major development in the life of the west bank of Thebes was the building of Medinet Habu in the reign of Rameses III (Figure 8.17). At its centre was another monumental stone temple where cults of Amun and of Rameses himself were established surrounded by extensive magazines. What made the complex different from others was an outer wall of even greater dimensions which turned it into a citadel or fortress. In the spaces between the inner and outer enclosure walls an orderly town was laid out, of mostly similarly sized houses. At an undetermined point during the Twentieth Dynasty this small town saw piecemeal rebuilding which replaced the original layout with a characteristic product of self-organization. Until modern times, the ancient landscape of the Theban necropolis area had survived to a remarkable extent. The Medinet Habu town appears to have been the only significant long-term population centre to have developed, continuously occupied into the Middle Ages. It offers, from a much later period, a good parallel for the way that some of the Old Kingdom pyramid communities developed (Chapter 5, pp. 204–11).

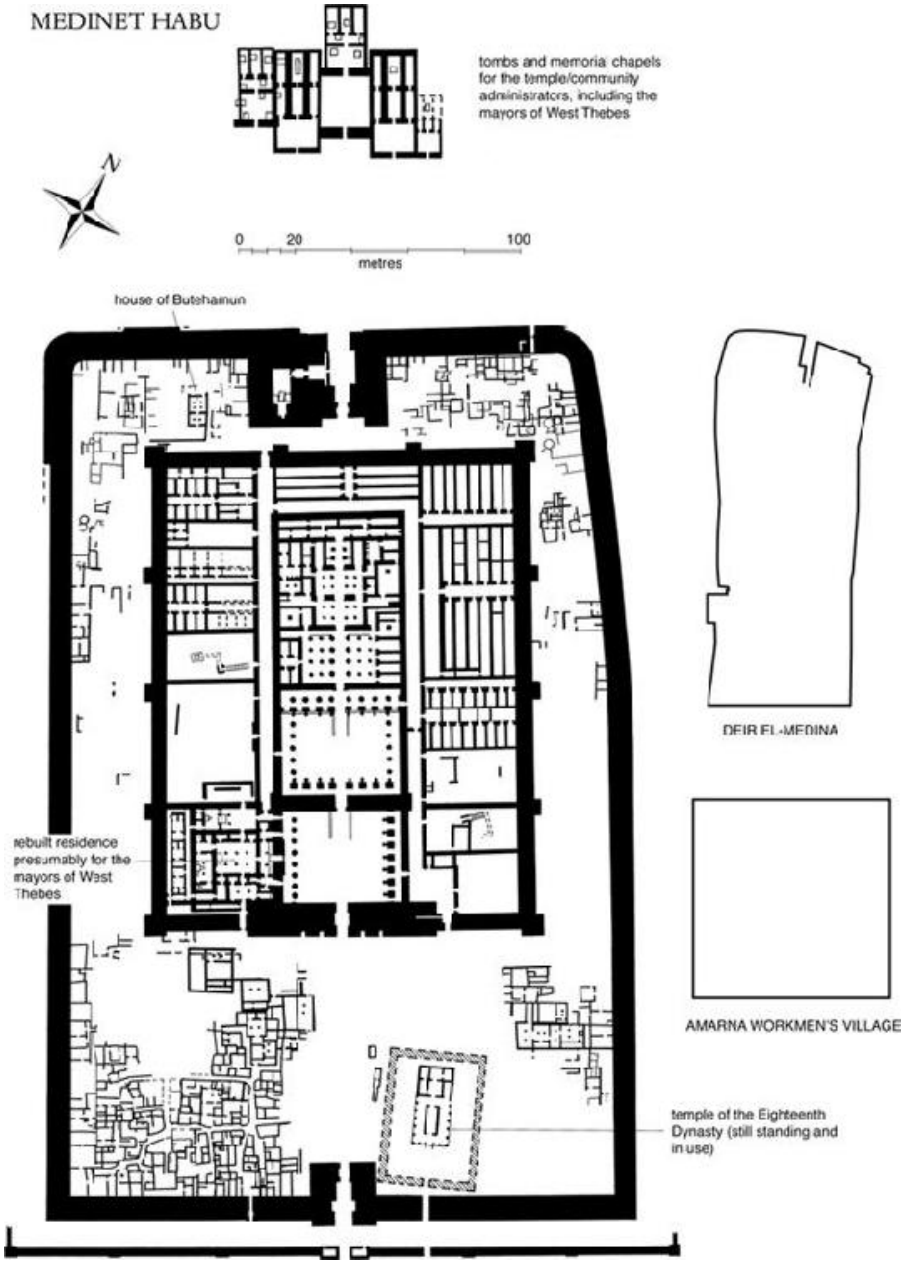


Figure 8.17Left. Plan of the mortuary temple of Medinet Habu and its surrounding town of Maiunehes from the period of the late Twentieth Dynasty and beyond. After Hölscher, *Medinet Habu* I, *passim*. *Right*. Outline plans of Deir el-Medina (in its final, late Twentieth Dynasty phase) and the Workmen's Village at Amarna, all at the same scale.

When reading the accounts of the robberies and other documents of the period which centre on the affairs of townspeople (pp. 303–4), two of the questions that arise are: where did many of them live and

where were many of the events played out? In particular, where did the mayor of western Thebes (as he is termed in the papyri) live and carry out his functions? The only realistic answer is the Medinet Habu town. One clue is that immediately behind and facing the rear fortified gate lay the tombs and tomb chapels of mayors.[92] The town itself also contained several larger houses in the southern sector possessed of columns. Rameses III's temple had originally been provided with a small palace. This had been significantly modified at a later date and probably kept in use for a long time after the end of the New Kingdom. It makes sense to see it as the mayor's residence and place of office, a place fit to receive the vizier and in which to hold important trials.[93] It recalls the size of the mayor's residence of the Middle Kingdom at Tell Basta (Figure 5.24, p. 240), but also, in size, formality and royal associations, the King's House at Amarna (see p. 348), which I have suggested was where the vizier held his court.

The identification allows a profile to be drawn of its population which can be compared with Amarna. In the first place, we can note its scale. One of the 'tomb robbery papyri' (Papyrus B.M.10068, dated to year 12 of Rameses XI) contains a list of the households to be found in western Thebes, extending between the mortuary temple of Seti I in the north and a place called Maiunehes in the south, a distance of 3 km.[94] (Figure 6.8, p. 264 marks their positions, Maiunehes being within the walls of Medinet Habu.) Between the temples of Seti I and Rameses III (Medinet Habu) come 24 houses identified by the name and occupation of the head of the household. (The temples themselves, together with that of Rameses II which lay in between, are also listed as 'houses'.) Then, after the 'house' of Rameses III come 155 more before the list ends. There can be no serious doubt that Maiunehes is the town that crowded between the two enclosure walls of Medinet Habu. We cannot be sure that the details of the plan given in Figure 8.17 are exactly those of the town at the moment of the census. There are many gaps in the plan and it is impossible in most cases to separate one house from another. Nevertheless, the space available is fixed by the inner and outer enclosure walls and, by this time, was filled with a settlement that must at least have approximated to Figure 8.17 and which the census list tells us included 155 households.

The first five houses cover the mayor himself (Paweraa) and other officials, one a scribe of the army. The list continues following no obvious system of grouping, probably because the compilers were making their way around the three sides of the town, having begun

with the largest houses in the south corner, recording each house as they encountered it. If we include the first five, the 155 heads of household comprise the following: 7 senior civil officials, 32 temple personnel, 12 scribes, 12 'military' (policemen and stable masters), 13 junior officials, 31 urban craftsmen, 47 with rural occupations (cultivators, herdsmen and fishermen) and one with no occupation specified.[95] We can group them into two main categories: officials (including those belonging to temples) on the one hand (76), and those engaged in manufacture and agriculture on the other (79, including the one householder without a title), an approximate 50/50 split. This is not what one would expect in a normal society where the non-elite considerably outnumber the elite. The large number of those attached to temples could reflect the concentration of temples and tomb chapels in the area, and the census identifies three who had outside appointments: in the temple of Rameses II, the temple of Amenhetep III (probably) and a temple of Sebek. (Four temple personnel also had other listed occupations: two were bronze-workers, one was an inspector or agent of land and one was a chief guard.) But, even so, the top-heavy picture remains. The explanation could be that the households of at least some of those in the first group contained men (and their families) who were dependants and so were not regarded as having households that should be registered and yet lived in one or more sets of rooms of their own and perhaps followed a particular occupation. This is what I have argued for Amarna, that many of the small houses belonged to people who were dependants of the officials living in the larger houses. If we apply to the 79 households of the second group the 'formula' for family size that we have encountered in the Deir el-Medina household lists (see the caption to Figure 8.16, p. 360) we gain a total of 247 individuals. For the more senior households who make up the other group we have little to guide us. Suppose, for the 76 households of the officials, we triple the size of the households of the second group, thus 247 × 3, and so we obtain a figure of 741. Added together, the result comes to 988 (say 1,000) for the population of Maiunehes at the end of the Twentieth Dynasty. This is a figure which will be not far short for the population of the whole of western Thebes, given the small number of houses that lay between Medinet Habu and the temple of Seti I.

The crowded plan offers far less space for houses of dependants (or anything else) than Amarna, and this is a contrast in itself. The town occupied a space of *c.* 24,500 sq. m. One of the modern reference grid squares of Amarna (200 × 200 m) has an area of 40,000 sq. m. As we

have seen (p. 359), these grid squares in the Main City contain between *c*. 50 and 110 houses. This is well below the density of Maiunehes, which compressed 155 households into 60 per cent of the area. (Or is it a sign that more of the walled spaces at Amarna that we do not count as houses actually accommodated people?) At the very least, the comparison shows that, on the scale of the time, Amarna was a place of significant size in area and in likely population. The census list also helps us to imagine what a census of Amarna might have looked like. A proportion of the households might have been omitted because they came under the 'jurisdiction' of an official. In the remainder of the cases almost all the heads of households would have been classed by an occupation, from scribe to bronze-smith, from fisherman (fish hooks are one category of finds from Amarna) to preparer of unguent (or oil boiler).

So far, we have looked at the range of people who might have lived in the city and been classed according to a rank or occupation and considered their numbers. It was deeply rooted in ancient Egypt (as in so many other societies at different times) to consider the people as a whole as 'hands', units of labour whose energies could be directed by the state into building, agricultural projects and soldiering. In considering the status of many of Amarna's inhabitants, therefore, we have to allow for individuals having two modes of existence: following a 'profession' and being conscripted or drafted to do something that was typically onerous. We might expect this to have applied primarily to men but we should not take this for granted. As we will see, there is convincing evidence from the cemeteries that children, both boys and girls, were subject to heavy labour. In the case of the private houses the city plan itself implies that the onus for building them lay on the people themselves, perhaps combining to assist one another and, in the case of the larger houses (which were well built), employing experienced builders. Akhenaten's plan also, however, envisaged several large stone buildings which required surface decoration through carving, painting and sometimes the use of coloured inlays. The Great Aten Temple and the Great Palace were the largest. Both saw changes of plan, in the case of the former amounting to a complete rebuilding on a larger scale, and neither may have been finished, implying that workers and craftsmen were needed for much of the city's brief history. We have one direct clue as to where labour was coming from: the myriad small glazed inlays that were set into stone blocks seem to have been one of the products of the city's many workshops which were embedded amongst the housing areas.[96]

Labour was particularly needed for the supply of the standardized stone building blocks (each being one cubit = 52 cm long). Amarna was located within an area of limestone suited to being used as building material. New quarries were opened, mostly towards the northern end of the site. One of them was a large, compact, underground quarry, seemingly belonging to the king's mother, Queen Tiy, who would thus have been following the ancient practice of donating labour for a particular project (see p. 181). The desert hilltops behind Amarna also preserve innumerable shallow surface quarries which look like the product of self-organization, in which many individuals have been told to deliver a quota of blocks and have spread out over the desert surface, squatted down on a vacant patch and begun hacking out the narrow trenches needed to isolate a block (or conceivably 'employed' a substitute to do it for them).[97] As a further supplement, the output of an existing quarry organization which served the nearby city of Hermopolis (El-Ashmunein) was diverted to Amarna and probably extended. These quarries (at Deir Abu Hinnis) supply a good example of scribal management preserved in patterns of lines and dates marked in red or black ink on quarry ceilings (as referred to in Chapter 4, pp. 184–5).[98] Graffiti record a few names, one of them a 'royal scribe and steward, Ahmose'; another records the visit of one Ramose, of 'the crew (named) Sehetep-Aten', evidence that the Old and Middle Kingdom system of organizing such work by individually named 'crews' was still in use, although there are no graffiti of crews in Amarna quarries. (The same man, with the title 'standard-bearer', also donated one or more bronze vessels to the Great Aten Temple.) As to the main source of the labour, we can look to how, at the beginning of his reign, Akhenaten laid the responsibility for providing blocks for his early buildings at Karnak on a high official and on 'the leaders of the army to perform a great forced-labour duty of quarrying sandstone'[99] at the quarries of Gebel Silsila, and wonder if the army units at Amarna did the same with the people of the city.

Akhenaten planned for a new Valley of the Kings at Amarna. To begin with, a single tomb for himself, Nefertiti and Meritaten was intended. This plan was subsequently modified by starts being made on separate rock tombs for the two women, so that each of the three key members of the family would have their own tomb.[100] At Thebes, royal tomb creation was the work of the community which lived at Deir el-Medina. Akhenaten transferred this organization to Amarna (and perhaps the actual community). As a result, two villages were built in the desert, isolated and virtually invisible from the main city

but much closer to the track that would have led to the site of the new royal tombs. Separated by *c*. 1.1 km, their modern names are the Workmen's Village (Figure 8.18) and the Stone Village. The Workmen's Village especially resembles the village of Deir el-Medina at western Thebes, and this points to an explanation for its similarly isolated location: it housed workers and craftsmen employed to create the royal tombs and perhaps to contribute also to the making of the decorated tombs of officials.[101] It was laid out on the floor of a shallow valley as a rectangular walled enclosure subdivided into long rectangular plots separated by streets. The plots were further subdivided into house units of similar size and basic design, although individual occupants completed their houses according to their own preferences (and access to resources). Following the addition of an extension to the village on the west side, it contained 72 houses (two of them, at the corners, larger than the others). On the ground outside the walled village, and climbing the slopes of the valley sides, the inhabitants constructed a self-organized jumble of buildings of brick and rounded boulders: family chapels brightly decorated with wall paintings, sets of animal pens and related buildings dedicated to the raising of pigs (Photograph 8.3), and an area where water and perhaps other commodities were received from the Main City; and created small gardens, a few tombs and extensive rubbish dumps, all of these features intermingled. The main groups of tombs, however, lay further back, on the upper edges of small valleys.

*Figure 8.18*Plan of the eastern half of the Workmen's Village at Amarna, showing the contrast between the planned layout of the walled village of houses and the self-organized mix of chapels and farm buildings on the ground outside.

*Photograph 8.3*A village industry: a pig-pen at the Workmen's Village, Amarna. It is one from Building 300, viewed to the north. The scale is 1 m long. By courtesy of the Egypt Exploration Society.

The Stone Village was smaller and more irregular, with much less in the way of external structures, part of its internal space occupied by open areas containing ovens and adjacent ash heaps. That it was a place where people lived is to be deduced from the nearby presence of a small cemetery.[102] Two explanations have arisen from the presence of two settlements. One uses the three sets of buildings associated with the Deir el-Medina community as a close parallel. They are, first of all, the main village of Deir el-Medina itself; secondly, a smaller collection of huts ('Station de Repos') built of rough stones on the high ground which one passes on the track between Deir el-Medina and the Valley of the Kings (where the workmen worked); and, thirdly, a collection of huts within the Valley of the Kings itself (something which was not replicated at the Amarna royal valley). It has been argued that the 'Station de Repos' served as a possible control post

and supply station for the Deir el-Medina workmen.[103] By analogy, therefore, the Stone Village would be its equivalent at Amarna, and both villages would have served the same community of workmen and their families. Yet the Stone Village and the 'Station de Repos' are significantly different in layout, the numerous ovens and thick accumulations of ash at the former seemingly having no parallel at the latter. The alternative is to see the two villages occupied by two different groups of workmen. The Workmen's Village itself, built as an official project, housed the initial workforce for the Royal Tomb. As the scale of work increased, with the development of separate rock tombs for members of the royal family, a new group of workmen from a somewhat different background was brought in to help out. By this time interest in creating a formally laid out village by the authorities had waned, and the incomers were left to make their own settlement with whatever materials they could gather from the area.

Imagined worlds at Amarna

Apart from loyalty and deference, what did Akhenaten demand of people? The move to Amarna and a substantial building programme must have affected the lives of many, but serving the ambitions of kings was a regular feature of life in ancient Egypt. People generally must have lived under the shadow of disruption to their lives and periods of hard labour ordered from above. The creation of Amarna involved a familiar kind of imposition. But what of Akhenaten's ideas? Was there an additional imposition as to how people were supposed to think and behave which particularly involved the gods, those basic elements of knowledge which largely defined how the Egyptians made sense of the world?

Personal names were one way by which individuals could indicate a deferential preference to a god or to a king, although many either did not do this or went through life with a name so abbreviated that the connotation (usually to a god) was effectively lost. Huya, Tiy, Tutu and Yuya (various spellings) are examples. In the case of the name Huya, for example, we can tell from some examples that it is an abbreviation of Amenhetep ('Amun is content', specifically Amenhetep I as god),[104] but evidently in its shortened form it had become so accepted in its own right that the continued use of this name at Amarna by one of its bearers, the steward of Queen Tiy (and owner of

Amarna rock tomb no. 1), caused no offence. The name of Akhenaten's chief of police Mahu was likewise an abbreviation of Amenenheb ('Amun is in festival').[105] Akhenaten signalled the new alignment in his thoughts by changing the second of his formal names from Amenhetep ('Amun is content') to Akhenaten ('devotee of Aten'), although his first formal name ('beautiful are the forms of Ra, the chosen one of Ra') gave priority to Ra, the sun god, of whom the Aten was its visible manifestation. The most important members of his family also took or were given names which honoured the Aten: Nefernefru-aten Nefertiti (his wife), and Meritaten, Meketaten and Ankhsenpa-aten, his three eldest daughters. This preference had little obvious influence on the senior officials and courtiers at Amarna, however. Of the owners of the rock tombs and known owners of houses only the vizier Nakht (whose full name was Nakhtpa-aten, house K50.1 and tomb 12), the royal scribe and general Pa-atenemheb (tomb 24) and the chief bowman and master of horse Nekhuempa-aten (original house uncertain) used a name in which the Aten is recognizable, although several had names honouring the sun god Ra. The 'chief of seers' Meryra is one, although Panehsy and Pawah, both senior figures in the cult of the Aten, were not. The sculptor who may have made the painted head of Nefertiti was called Thutmose (or Thothmose), the name of the god Thoth written with the ibis-headed sign for the god.[106] It would be wrong to conclude, however, that to some individuals what their name expressed did not matter. For a few did change their name. A figure at the Amarna court, for whom we have both his house (P47.19) and his tomb (no. 11), was a royal scribe and general (and steward for Amenhetep III). When he moved to Amarna he had the name Ptahmes ('Ptah is born') and this was recorded on a limestone door frame (which perhaps he had transported from his former house). The hieroglyphs for Ptahmes were filled with gypsum and had the name Rames/Ramose ('Ra is born') carved over the top.[107]

Of the citizen body in general we have very few names. A wooden coffin from one of the general cemeteries had belonged to a woman who alternated the name Hesyenaten with Hesyenra ('one praised by Aten'/'one praised by Ra'), a revealing alternation in itself. A stela from the Workmen's Village (see further below, p. 369) gives us the names of one fairly lowly family: a man, his wife, one son, four daughters and a married woman (perhaps the son's wife). Despite calling himself 'one praised by the living Aten' (an interesting sign that ordinary people saw the Aten as having a personally benevolent

aspect), he had kept his name which honoured the god Ptah, Ptahmay (short for Ptahemheb, 'Ptah is in festival' or Ptahemhat, 'Ptah is at the fore'), and had given two of his daughters the name Bakist ('servant of Isis', one of them perhaps having died before the birth of the other). The remaining names record no divine associations.[108] It is reasonable to think that some at least of the children may have been born at Amarna. Ptahmay himself seems to have felt a particular affinity to Isis but his stela also shows a person making his own adjustment to the times, modifying his personal pantheon to take in the Aten. This kind of evidence suggests a widespread pragmatic attitude to the times: the Aten had gained greater recognition than before, but not particularly at the expense of family custom. Officials, who would have been born before Akhenaten's changes, generally did not alter their names out of respect for his ideas despite their dependence upon him and their protestations of loyalty.

A published list of names of men on inscribed objects found in the city (many of them involved in the production of commodities and written on the shoulders of pottery amphorae) must include a proportion from outside Amarna, particularly those working in vineyards in the north. Out of 86 names, only three (or five) use the name of the Aten, roughly the same number as names built around Amun. An example of the latter is a man responsible for producing wine for the 'House of the Aten' whose name was Amenemipet ('Amun is in Luxor'). The name Nebamen ('Amun is my lord') appears three times in the list, perhaps for the same man.[109] Another source is two fragments of accounts papyri (provenance unknown) which record deliveries of commodities to a river boat at places in Upper Egypt, possibly the Theban area.[110] Each person making the delivery is identified by name and parentage, providing a sample of 46 personal names. Four of the names are compounds using the name Aten: Nebpa-aten ('The Aten is lord', a father), Baketpa-aten ('Servant of the Aten', a daughter), Pa-atenemweskhet ('The Aten is in the Broad Hall', the name appears twice for a female but linked with different husbands and so perhaps there were two women with this name) and Pa-atennakht ('The Aten is strong', a father). The riverine villages had regular contact with an institution and thus would have heard about what was happening in the wider world. The news of Akhenaten's ideas and actions seems to have been received with positive interest amongst at least a modest proportion of the people concerned. It might signal no more than a pragmatic adjustment by powerless people to a new regime, but in its tiny way it cautions against thinking

that Akhenaten's moves caused national outrage. The Aten names appear to cover three generations and it is even possible that the document dates to after the Amarna Period, perhaps as late as the early Nineteenth Dynasty, thus some 40 to 50 years after Akhenaten's death.

Unanimity of view is not a natural characteristic of human groups. Some individuals will hold to one opinion, others to one that is antithetical, and most will have a weak interest somewhere in between. The pattern of personal names of the Amarna Period is really what we should expect, particularly since their owners were living in a society which was only just beginning to discover partisanship based on ideas (as distinct from family and dynastic considerations).

Positive interest to a more significant level is illustrated by two papyrus family letters which were sent from Amarna to Thebes and, for reasons we do not know, were buried unopened in a tomb.[111] The sender, Ramose, had the profession of 'oil boiler' or 'preparer of unguent' in the household of princess Meritaten, probably a lowly position (although one letter was addressed to his brother who was a scribe of the treasury). The letters (conceivably written for Ramose by someone else) begin with formal greetings in which only the Aten is mentioned as the bestower of blessings. One greeting reads: 'Now here I am calling upon the Aten … in the city of Akhetaten … to keep [you] healthy each day …' In both letters Ramose speaks of family problems which are now hard to understand (in part because of damaged passages) but which involved possible legal proceedings. Evidently to fortify himself he either appeals to the Aten for guidance or expresses thanks to the Aten for guidance received: '"May the Aten [provide] me with guidance", so said I. And so he (the Aten) has provided [me with guidance]'; and 'Now here I am saying to the Aten (life, prosperity, health!), "How wonderful!" See, [I am] fine. I have been provided with guidance.' These are probably the clearest expressions we have of the inner thoughts of one person of no particular standing at Amarna (although probably living at the North Palace and so part of the royal household). They show what it meant to be a devotee of the Aten.

In communities large and small, in earlier and later times, individuals found opportunities to identify places where they could contact imagined beings, usually those who could be appealed to for help and who satisfied the basic urge which most people have to express deference and to humble themselves before authority from time to time. The places could be distinctive features in the landscape,

could be tombs where contact was sought with the imagined presence of a dead relative, a location within a house or, once a cult had become established, a separately built shrine. At the Workmen's Village, where isolation allowed a distinctive culture to flourish, families built their own chapels just outside the village walls (Figure 8.18, p. 366). Their cemetery lay a short distance further back, and memories of the dead were probably stimulated in the minds of the living by visits to the chapels. But their first function was to serve as places where families could meet and eat meals in an atmosphere which was calm and private, and also rarified through painted wall decorations and the furnishings of cult.[112]

At the back of each chapel stood small waist-high alcoves in which objects could be placed which people wished to honour and also use as channels of communication with transcendental beings. Only a few relics of this practice were left behind. They included a limestone stela depicting the god Shed, 'the Saviour', who offered protection against scorpions; a second stela (Figure 8.19) decorated on the front and sides with scenes of the man named Ptahmay (mentioned above, p. 368) who, although not given an earthly title, is called 'one praised by the living Aten' but who still kneels beneath figures of Isis and Shed and, on the sides, is accompanied by depictions of his family; a wooden sun-disk provided with horns (perhaps from a wooden statue of Hathor as a cow); a wooden base bearing the name of a man, Nehemmaatiu, described as a 'servant of the Place' (a title similar to that borne by many men who lived at Deir el-Medina) and perhaps to support a statuette of him; a small wooden plaque painted on both sides and probably the top of a standard or staff of office, depicting a man kneeling before a canine god (Wepwawet?) on one side, and two running figures who appear to be policemen on the other. The walls and door frames of the chapels had been decorated in a style that is typical for the late Eighteenth Dynasty but pays no heed to the subject matter characteristic of Amarna. In three places the name Amun or Amun-Ra was invoked in prayers, and described in one of them as 'the good ruler eternally, the lord of heaven, who made the whole earth'. Just outside the village entrance and not far from the chapels someone had discarded an irregular rounded stone which, by the application of painted lines, had been turned into an image of a falcon, presumably the god Horus (Figure 8.19).

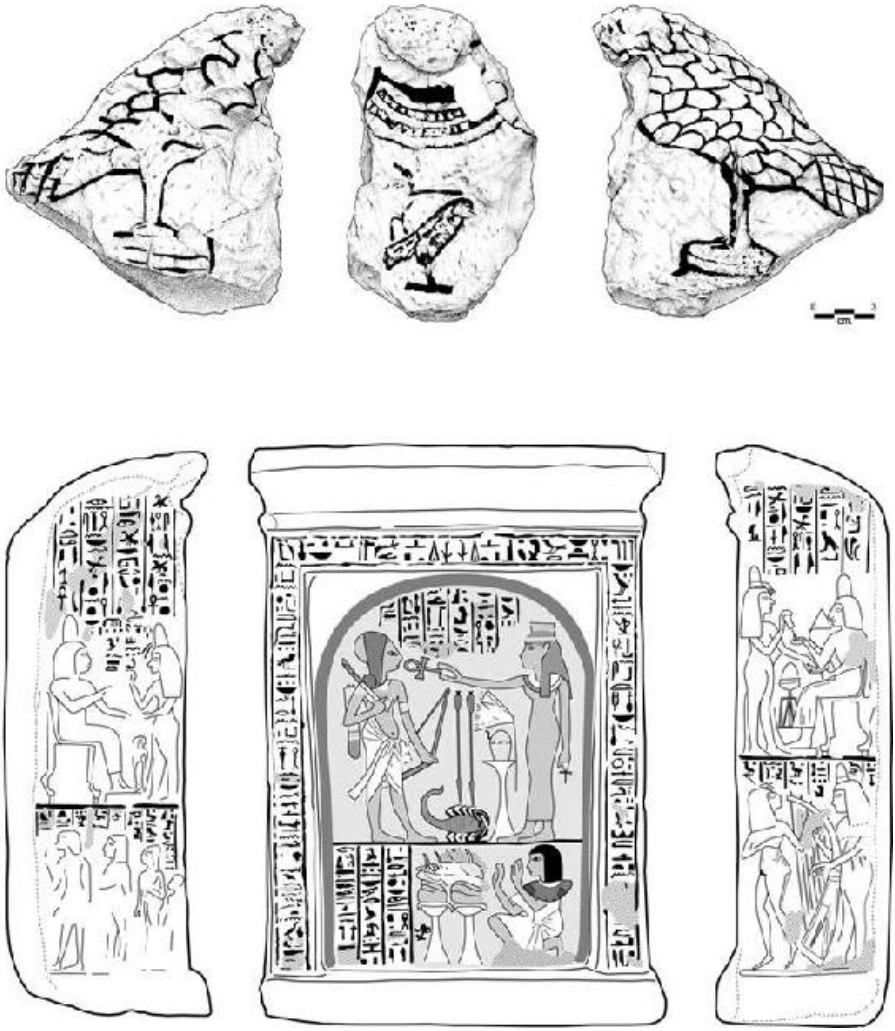


*Figure 8.19*Other gods of Amarna. *Top*. An image of a falcon god (presumably Horus) fashioned from a rounded, unworked stone with a painted design added. Found just outside the entrance to the Workmen's Village. The painted lines are in black which, within the outlines of the body and legs, have been drawn over a coat of yellow paint. Maximum length 14 cm; maximum height 15.5 cm. Object no. 1919, from square J19 level (7). Drawn by B. Kemp, inked by A. Boyce. *Bottom*. Stela honouring both the goddess Isis and the god Shed, protector from scorpions. Shed is depicted as a boy warrior, with sidelock of youth, bow in left hand, mace in right hand, quiver for arrows over his right shoulder. The central panel is painted yellow with a blue surrounding band, curved at the top. The details were originally picked out in red, blue, green and yellow, with the hieroglyphs in blue between incised lines painted in red. The owner's family is depicted on the sides of the stela. From the Workmen's Village, chapel 525. After Peet and Woolley, *COA* I, 96–7, Pl. XXVIII.3; hand copy of texts in the EES archives; personal photograph. Now in the Egyptian Museum, Cairo, JdE 46954. Height 44.4 cm.

The excavators who first encountered this material, which seemed

to contradict the general understanding of Akhenaten's intentions, concluded that it belonged to the short interval between Akhenaten's death and the abandonment of the city in the reign of Tutankhamun.[113] This cannot be disproved. Nevertheless, the chapels themselves seem to be an integral part of the overall layout of the village and not additions, although this applies primarily to the building fabric and less to the portable objects. Moreover, the alternative picture, that Akhenaten's set of ideas expressed a preference which did not deny the validity of others, finds support in widespread evidence of a similar kind from across the city. Individual instances might post-date Akhenaten's death; that all of them do is implausible.

There is no sign that the items found in these chapels that were not part of the decoration of walls and doors were fixed in place. They seem to have been set up temporarily for moments of devotion, with the rear alcoves being the location that would give them most prominence. Otherwise they could have been stored in the chapel or kept at home, perhaps wrapped in a piece of linen. Objects of this kind act as portals to the imagination. A person talks to imaginary beings through them or with their aid, sometimes reinforcing deference with gifts, primarily in Egypt in the form of food and pure water poured from a vessel. More of this material – quite varied in its nature – has been found throughout Amarna. Some is in the form of flakes and small slabs of limestone bearing designs in ink or in rough carving.[114] The subject matter includes figures of divinities: the baboon god Thoth (patron of writing), Ptah (particularly associated with Memphis), a sacred ram and Taweret (Thöeris), a goddess who offered protection, especially at childbirth; and representations of the process of gaining attention: a figure of a man making offerings before an altar, and crudely painted depictions of ears by which the god's hearing was aided. If we look for concentrations of this kind of material in the hope of identifying actual shrines in the city, the results are disappointing. A stela showing a man before an altar came from a collection of rooms beside one of the public wells in the North Suburb (T36.67), but the plan of the walls tells us little: they have neither the character of a house nor of a shrine.[115] Evidence from the Main City is a little better. Again beside a public well the excavated plan of a little building (P47.10, Figure 8.12, p. 350) looks like a shrine, although no distinctive material accompanied it.[116] Not far away, apparently in the same open space although the context had been largely destroyed by denudation, the same excavation uncovered

a small building which is, from its plan, the strongest candidate for a shrine in a public place (P48.4, Figure 8.12, also marked 'C').[117] Apart from its plan, a well-made limestone stela was discovered, which depicted a man adoring before a table of offerings, and above him a group of three deities: Khnum, Satet and Anukis, the family of gods of Elephantine.

Most of the material that can be considered as portals to the world of the gods comes from areas of housing and workshops. Many houses were equipped in one of their rooms with a small platform that could act as the point of contact.[118] As with the chapels at the Workmen's Village, there is no sign that significant objects, even small ones, were fixed in place. One must assume that such things, including small stelae, were kept separate and put in place only as the occasion demanded. One collection of material that served this end and which was found in an undisturbed position (house N49.21) came from the tiny room beneath the stairs.[119] It consisted of a stela showing a woman and girl before Taweret, and parts of two female figurines and two model beds, all made in pottery. The last items represent a more numerous category: the spirits behind which might have been more appropriately invoked in other parts of the house. The figurines, in the shape of their heads and hair, sometimes resemble the goddess Hathor, and, taken with the model beds, suggest a means to create an ambience suited to womanhood and the danger and mystery of childbirth.[120] It embraced the goddess Taweret and the dwarf and demonic god Bes (who had a 'trickster' role not dissimilar to various figures, including Mr Punch, in European folklore). At the Workmen's Village Bes and Taweret appear in wall paintings, and there is some evidence that an upstairs room with special wall paintings supplied the focus for domestic femininity.[121] Other statuettes and figurines moulded into the bottom of pottery bowls depict a cobra. A slightly later magical text (not from Amarna) contains the words to be spoken over pottery models of cobras placed in the bedroom to ward off night terrors.[122]

Night was the time when malevolent forces were abroad, which could be spirits of the dead seeking to bring disease and death. One of Akhenaten's maternal grandparents (thus Yuya or Tuyu) possessed a finely made bed which was found in their tomb in the Valley of the Kings (Figure 8.20). Although buried a few years before Amarna was created, the bed illustrates the motifs that could be employed to ward off the night's imagined dangers. Both sides of the head board were decorated with low-relief figures of Bes and Taweret covered with

gold leaf. The heads of the two legs at the foot end bore images of the *Wedjat*-eye also in gold leaf. This was an ancient design in which the shape of the human eye was combined with details of the plumage surrounding the eye of a falcon, the whole representing the 'good' Eye of Horus. It stood for wholeness and wellbeing. The sleeper was thus assured of protection by what, to judge from their popularity at Amarna as small and cheap items of personal adornment, were the three most potent protective forces at that time: Taweret, Bes and the Eye of Horus.

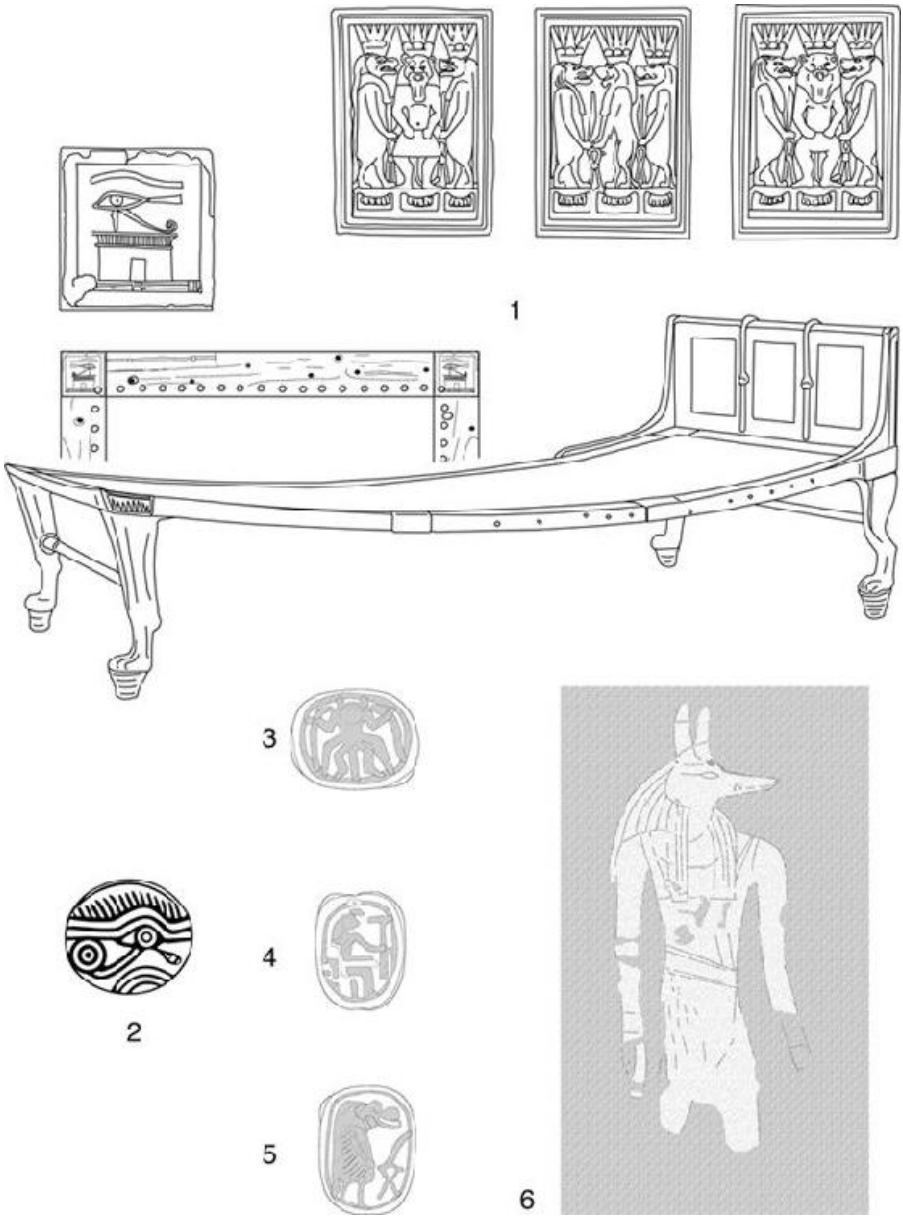


*Figure 8.20*Means of protection. (1) Wooden bed from the tomb of Yuya and Tuyu, parents of Queen Tiy, wife of Amenhetep III. The three gilt-stucco panels on the head board depict (*left* and *right*) the god Bes, wearing lion's mask, flanked by the goddess Taweret (Thöeris) and (*centre*) the goddess Taweret, twice with crocodile head and once (middle) with the head of a lioness. The design of the Eye of Horus (*wedjat*) is outlined on a gold-leaf cover over each of the two legs at the foot end of the bed. After J.E. Quibell, *Catalogue général des antiquités égyptiennes du Musée du Caire, nos. 51001–51191. Tomb of Yuaa and Thuiu*, Cairo, IFAO, 1908, Pl. XXVIII; T.M Davis, *The Tomb of Iouiya and Touiyou*, London, Constable, 1907, p. following 36; plus personal photographs. The bed is in the Egyptian Museum, Cairo. Drawing by M. Bertram. (2) The Eye of Horus motif on a domed-back bead made in glazed

steatite, which had been attached by thread to the left hand of a woman (individual 114) who had an imperfectly healed fracture of her left upper arm and had been buried in the South Tombs Cemetery at Amarna. Object no. 39449. Width 1.5 cm. Facial reconstruction of the original owner in Kemp, *City*, 225, Fig. 6.32. (3)–(5) Designs on the bases of three scaraboid beads with hippopotamus backs found in the grave of a woman and child (individuals 188A and B) at the South Tombs Cemetery. (3) Bes. (4) A seated goddess (probably Isis). (5) Taweret. Objects nos 39933a, b, c. Length of Taweret bead 1.5 cm. Drawn from photographs by M. Bertram. (6) Figure painted in white with red lines on a black background on the outside wall of a wooden coffin found at the South Tombs Cemetery, coffin (13438). It depicts a canine-headed protective deity, one of the Four Sons of Horus. Height of image as preserved *c.* 20 cm. Drawn (by B. Kemp) from a photograph taken by L. Skinner.

Figurines required a particular act to bring out the power to help and to protect that the user desired, an act performed, it would seem, within the house. The same person, however, could also carry the same symbols wherever they went, worn as jewellery, often cheaply made in brightly glazed faience and in the form of delicate rings or strung beads to be worn on the finger, or strung in large numbers to form a broad collar, perhaps to be worn on special occasions. Bes and Taweret were popular motifs, the sign for *maat* also occurs, but the most popular of all was a version of the Eye of Horus (the *Wedjat*-symbol; Figure 8.20), widely worn as a finger ring made of faience. Similar items accompanied some of the individuals buried in the South Tombs Cemetery. (These symbols also had their place in the spells and illustrations of the Book of the Dead, although so far no copy has been found at Amarna.) Amidst these tokens of popular interest in benign powers are also to be found rings where the design is the name of the reigning king, Akhenaten himself and his two successors, Ankh-kheperura (who, to begin with, took Smenkhkara as his other name) and Neb-kheperura (Tutankhamun). Although the twin names of the Aten also appear on faience pendants, it is noticeable that the image of the Aten itself, the sun-disk with rays, had no place in this little world of protective images with which the people of Amarna adorned their bodies, in life and in death.

The evidence supplied by the cemeteries as well as by certain pictorial representations none the less suggests that changes were taking place. Many people seem to have become reticent about or felt the need for avoidance of the area of interest which centred on Osiris, namely Osiris himself, the Four Sons of Horus and Anubis, although the picture is sufficiently inconsistent as to suggest that (as one might expect) people were not uniform in their views. A few pictures of funerals show that people at least aspired to keeping to the traditional forms: the gathering of mourners, the grand feast in which cattle were

slaughtered, the presentation of offerings, the Opening of the Mouth ceremony in front of the prepared body, the burial of funeral equipment. Yet in the main example (in the tomb of Huy, no. 1) Osiris is conspicuously absent.[123] In the general cemeteries there was perhaps a tendency to bury fewer items (though the lack of completely excavated cemeteries from other sites of the period, in which all graves no matter how disturbed were examined, makes a numerical comparison difficult). So far, in the general cemeteries, no example has been found of a *ushabti*-figure, the statuettes which acted as substitutes for the deceased if called upon to perform conscripted labour and also linked him to Osiris (and with a section of the Book of the Dead, 'Chapter' or 'Spell 6'). If this appears to be the deliberate avoidance of an Osiris feature, how can we explain – except through a tolerance of inconsistency greater than ours – the presence of at least 248 figures of this kind, many carved from granite, in Akhenaten's own tomb (some of them manufactured in a workshop area near the Great Palace)?[124] Excavation in the main cemetery has recovered fragments from 40 wooden coffins, of which 20 were decorated, although in only 8 cases can something of their decoration be reconstructed. Their overall shape is traditional. Three of them continue the pre-Amarna style which placed the deceased in the role of Osiris supported by the figures of the Four Sons of Horus (at least one of which was given the head of a canine, Figure 8.20, p. 373). Three others, however, replace the funerary deities 'by figures of male offering-bearers and women in the mourning pose. Rather than the recitations by the old gods, the texts on these coffins contain prayers for offerings and other benefits in the afterlife.'[125] 'One of the coffins showing traditional gods was buried close to two others in the new "godless" style, suggesting that they were interred not far apart in time, and perhaps owned by people who knew each other in life.'[126] These 'godless' coffins are one of the clearest pointers to a change of outlook by at least some of the citizens of Amarna, evidence of a positive response to Akhenaten's seeming questioning of traditions. But whether this was a source of contention amongst people we cannot tell, nor whether the suppression of old ideas at the personal level was part of Akhenaten's plan, nor whether the variety of people's responses reflects choices that people felt they had or the result of only partially understanding what was expected of them. We have no idea whether Akhenaten sought to disseminate his ideas widely or whether they trickled down, with the risk of distortion and misunderstanding.

The quality of life and where do we go from here?

The letters of the 'preparer of unguent' Ramose bring us closer than anything else to the inner world of one of Amarna's inhabitants (see p. 369). The letters are mostly about domestic matters, some of which were contentious. He had a specific complaint about his own situation, too: that he was living in the 'house' of the princess Meritaten (probably the North Palace) without a woman (is he referring to his wife?). He pleaded with his relatives to solve this problem. Nothing in his letters suggests unease with the times in which he was living or any bodily afflictions. He might have remained at Amarna until the end, returning to Thebes where, so we learn from his letters, several members of his family lived. Or he might have been one of the thousands who died at Amarna. In that case, he would have eventually become one of the anonymous individuals reduced to a skeleton in the large cemeteries on the desert floor behind Amarna.

At the time of writing excavation of the two main cemeteries at Amarna has yielded over 500 sets of human bones (though in varying degrees of completeness). Thanks to the application of forensic skills developed in recent decades, we can learn far more from them than was the case in the earlier days of archaeology. Much analysis has been carried out and more is to come. It presents a sombre picture of physical life at Amarna.

> Both the southern and the northern cemeteries show evidence of dietary deficiency, disease, and heavy workloads. Vitamin C deficiency is attested in the presence of skeletal lesions of scurvy, while porotic lesions of the eye orbits and skull (known as cribra orbitalia and porotic hyperostosis) point likewise to diets deficient probably in iron or Vitamin B12, among other micronutrients. An insufficient diet during the growth period can lead to overall lower population mean stature, which is also seen at Amarna. We do not yet have many well-excavated skeletal assemblages from other sites with which we can compare the Amarna skeletons, especially sites of a similar date. However, the Amarna population is noticeably shorter than those comparative populations that are available for study from earlier Egyptian cemeteries, and sites of a broadly similar date to Amarna and later in neighbouring Sudanese Nubia. Childhood years therefore seem to have been particularly tough at Amarna.
>
> Signs of heavy labour are also widespread at the cemeteries.

> Individuals of all ages above 7 years old (the approximate end of non-working childhood) exhibit skeletal lesions of degenerative joint disease (arthritis), spinal trauma, and fractures typical of occupational accidents. Spinal trauma is of particular interest, in that the fractures identified are those often associated with extremely heavy labour.[127]

Lives could be short. At the northern cemetery (from the first season of excavation in 2015), out of 77 sets of bones to which an age determination could be given, all but one were from people who had died before the age of 25.[128] The northern cemetery, in fact, presents us with results from which it is hard to escape the conclusion that child labour was being extensively used. Child labour, like slavery, is an emotional topic. In traditional societies, it can be normal and not necessarily damaging for children to work as members of the family in agriculture or domestic manufacturing. It becomes harmful when they are pressed into working excessive hours at heavy and sometimes dangerous tasks. The industrial revolution in Britain in the eighteenth and nineteenth centuries relied heavily on child labour, including in mines and textile mills, until legislation and changing attitudes to the suffering that resulted led to the decline of the practice. At Amarna (and this would be generally the case in ancient Egypt) the heavy and dangerous tasks must have centred on stone-working: in the quarries, in the transport trains and at the building sites. The standardized stone blocks at Amarna, each of them (when of limestone) weighing between 60 and 70 kg, were made to be carried singly by individuals, which was a loading likely to cause skeletal damage especially on the bodies of the young. It is worth noting that the northern cemetery is located not far from the main quarries at Amarna itself. Even so, the generally low age at death is startling. Perhaps the simplest explanation is that, from a weakened start in life, hard labour so reduced their resistance to infection that they died at an unusually high rate, a possibility heightened by written sources from countries to the north that refer to an epidemic around this time. The fact that they appear to have been buried not within a family cemetery but one specifically for them also carries the implication that they had been conscripted and kept from their homes.

Despite the grimness of life which this evidence is revealing, when choosing to show who they were, some of the Amarna people still produced positive images. The man Ptahmay, who regarded himself as ‘honoured by the Aten’ yet held warmer feelings for Isis, celebrated

happy times with his family on his stela (Figure 8.19, p. 370). The most graphic illustration we so far have from the cemetery excavations at Amarna is a stela on which a couple (presumably husband and wife) are shown seated side by side, the man relaxing easily in his chair and turning towards the woman whose shoulder he clasps with an outstretched arm (Figure 8.15, p. 357). At the same time, another man (a son?) pours water for them at a table of offerings. All three are very likely to have lived lives that are defined for us by the conditions recorded on the excavated skeletons and the same could well have been true for Ptahmay and his family who lived at the Workmen's Village. Hard lives do not necessarily extinguish love and hope.

The people of the cemeteries illustrate the paradox of civilization. Civilization is the outcome of behaviour which, when personally encountered, can be nasty, but when distant we forgive because we approve of the end product: architecture, art, interesting ideas and the stability that comes from the exercise of absolute power. The fact that I am writing and the reader reading, instead of both of us gathering wild cereal grains, is possible only because in past times kingdoms and empires carved out oases of leisure for the gifted and the learned at the expense of the many, who had to foot the bill. Without the will to coerce others, by conscription to labour and by warfare, humanity would live in a perpetual Stone Age (which, even if it seems superficially attractive, cannot in any case be recreated). If we dare to accept that the progress of civilization is to be measured in the rise of those factors which inhibit or humanize the exercise of the power which started the process in the first place, what does make us different?

At the two poles of our lives – our intuitive personal strategies to survive, and our direction by the ideologies and instruments of our states and communities – we remain largely as we have been since complex society first emerged. We still live in the shadow of the Bronze Age. The societies of the distant past, such as that of ancient Egypt, reveal this starkly. We can see in them the bare bones of existence ever since. What is different is our ability to make ourselves the object of rational study, to explore the deep roots of our condition and to recognize the infinite ability of the mind to invent what seem to be realities but are in fact myths. Myths are that by which we live, but more than ever we can choose to follow rational, humanitarian myths, the ideas that we create (embracing the concept that 'human rights' should be universally valid), that allow us to move on from the

cruelties that underpinned past progress. The true study of ourselves and how we have become as we are is a subversive subject.

Notes

1 The first source for Akhenaten and Amarna should be the collected translations, Murnane, *Texts*. Recent treatments of king and city include: Laboury, *Akhénaton*; Freed, *Pharaohs of the Sun*; C. Tietze, ed., *Amarna: Lebensräume, Lebensbilder, Weltbilder*, 2nd edn Weimar, Arcus-Verlag, 2010; M. Gabolde, *Akhenaton: Du mystère à la lumière*, Paris, Gallimard, 2005; Arnold, *Royal Women*; Kemp, *City*; Seyfried, *In the Light*; Manniche, *Colossi*.

2 Kemp, *How to Read* is my attempt to confront the weirdness of something which I can see ought at the same time to be respected for its daring and its atttention to detail.

3 Piankoff, *Litany*.

4 In the 'Salle des Litanies': J-Cl. Goyon and H. El-Achirie, *Le Ramesseum* VI, Cairo, Centre de documentation et d'études sur l'ancienne Égypte, 1974, 23, Pl. VIII.

5 Lichtheim, *Literature* II, 89–100; Simpson, *Literature*, 278–83.

6 P. Bulak 17 = P. Cairo 58038: Pritchard, *Texts*, 365–7.

7 Sections of the book are illustrated in Z. Hawass, *The Royal Tombs of Egypt: the Art of Thebes Revealed*, Cairo, AUC Press, 2006, 132–4.

8 Martin, *Royal Tomb* II, 20–7, Pls 18–33.

9 *Wb.* II, 20.5 and 6 (with Belegstellen); Laboury, *Akhénaton*, 72–3, 184, 207–8.

10 Murnane, *Texts*, 111–12, 192; Kemp, *City*, 29–30.

11 Petrie, *Abydos* I, 30, Pls LXII–LXIV.

12 J.-F. Carlotti and P. Martinez, *CdK* 14 (2013), 231–77, esp. 251, Figs 18, 19. The mass of Karnak material from Akhenaten's reign is presented in Smith and Redford, *Project* I; D.B. Redford, *The Akhenaten Temple Project* II, Toronto, Akhenaten Temple Project, 1988; J. Gohary, *Akhenaten's Sed-festival at Karnak*, London and New York, KPI, 1992; Blyth, *Karnak*, 119–26; R. Vergnieux and M. Gondran, *Aménophis IV et les pierres du soleil: Akhénaton retrouvé*, Paris, Arthaud, 1997. Whilst at Amarna the statues of Akhenaten and his family were thoroughly broken up, his many colossal statues at Karnak mostly suffered damage which is more consistent with demolition and the wish to reuse parts of them rather than with a desire to obliterate his existence, although some do seem to have been attacked with a desire to disfigure. This is documented and discussed in Manniche, *Colossi*, 19–22.

13 Murnane, *Texts*, 240–1.

14 W.J. Murnane and C.C. Van Siclen III, *The Boundary Stelae of Akhenaten*, London and New York, KPI, 1993; Murnane, *Texts*, 73–86.

15 Murnane, *Texts*, 83–4.

16 Murnane, *Texts*, 78.

17 F. Hagen, 'On some movements of the royal court in New Kingdom Egypt.' In van Dijk, *Mouthful of Dust*, 155–81, p. 166.

18 G. Roeder, *Amarna-Reliefs aus Hermopolis*, Hildesheim, Pelizaeus-Museum, 1969; R. Hanke, *Amarna-Reliefs aus Hermopolis: Neue Veröffentlichungen und Studien*, Hildesheim, Gerstenberg, 1978; Cooney, *Amarna Reliefs*.

19 Murnane, *Texts*, 77–8; H.W. Fairman, in Pendlebury, *COA* III, 189–212. Some of the key names for buildings in the Amarna Period referred to buildings that seem to have existed in more than one location. There was even more than one place named Akhetaten, others being at Thebes, Memphis and perhaps

Heliopolis (Wegner, *Sunshade Chapel*, 117–21, where the phrase 'an essentially multivalent toponymic identity' is used, p. 117).

20 B. Kemp, *CAJ* 10 (2000), 335–46.

21 Principally a scene in the tomb of May (no. 14) and another in the tomb of Meryra (no. 4), Davies, *Rock Tombs* V, 3–4, Pl. V; Davies, *Rock Tombs* I, 34–5, Pls XXV–XXIX.

22 Kemp and Garfi, *Survey*, 48, Fig. 10.

23 E. Schauer, *Ungeplante Siedlungen*. Juval Portugali, *Self-organization and the City*, Berlin, Springer, 1999 is a far more theoretical and intensive analysis of the underlying mathematics, as they can be applied to modern cities. See also B. Kemp, 'How the city of Amarna came into being.' *Akhetaten Sun*, 22 (2) (2016), 2–13.

24 Kemp, *City*, 161–80.

25 Peet and Woolley, *COA* I, 5–9, Pls III, IV, V, VIII.1.

26 F. Ll. Griffith, *JEA* 10 (1924), 302, Pl. XXXIII; Kemp, *City*, 44–5, Figs 1.15, 1.16.

27 Borchardt and Ricke, *Wohnhäuser*, 238–42, Abb. 34–5, St. V, Hp. 74, 75, Taf. 18A.

28 Kemp and Garfi, *Survey*, 47–9, Fig. 10.

29 Kemp and Garfi, *Survey*, 39–44, esp. Fig. 7; Kemp, *City*, 151–3.

30 Davies, *Rock Tombs* V, 3–4, Pl. V.

31 Pendlebury, *COA* III, 33–85, Pls XIIIA–XV, XXXIII–XLIV; P. Vomberg, *Das Erscheinungsfenster innerhalb der amarnazeitlichen Palastarchitektur: Herkunft, Entwicklung, Fortleben*, Wiesbaden, Harrassowitz 2004; Kemp, *City*, 135–40; K. Spence, 'Royal power in New Kingdom Egypt: the palaces and gardens of Amarna.' In J. Ganzert and I. Nielsen, eds, *Herrschaftsverhältnisse und Herrschaftslegitimation: Bau- und Gartenkultur als historische Quellengattung hinsichtlich Manifestation und Legitimation von Herrschaft: Symposium 22.–24. Oktober 2014*, Berlin, Lit, 2015, 13–33.

32 Weatherhead, *Palace Painting* describes and illustrates the painted surfaces found in all of the Amarna palaces.

33 Pendlebury, *COA* III, 60–1, 150, Pls XIIIC, XLIV.1, 2, LXXXIII.III; A. van der Perre, *JEH* 7 (2014), 92–3.

34 F.G. Newton, *JEA* 10 (1924), 294–8; T. Whittemore, *JEA* 12 (1926), 4–9; Frankfort, *Mural Paintings*; Kemp, *City*, 135–7, 146–51.

35 C. Speiser, *Offrandes et purification à l'époque amarnienne*, Turnhout (Belgium), Brepols, 2010.

36 Pendlebury, *COA* III, 5–20, Pls III–X, XXIV–XXIX; Kemp and Garfi, *Survey*, 50–3, Fig. 11; Kemp, *City*, 87–95; P. Vomberg, *Untersuchungen zum Kultgeschehen im Großen Aton-Tempel von Amarna*, Göttingen, Hubert, 2014.

37 Pendlebury, *COA* III, 92–100, Pls XLVI–XLVII; Kemp, *City*, 86–7.

38 M. Mallinson, 'Excavation and survey in the Central City, 1988–92.' *AR* VI, 169–215, esp. p. 215, Fig. 5.26.

39 B.J. Kemp, *JEA* 62 (1976), 91–2; R. Stadelmann, *MDAIK* 29 (1973), 221–42.

40 E.g. Davies, *Rock Tombs* I, Pls XI, XXVIII, left side.

41 E.g. Davies, *Rock Tombs* I, Pls XI, XXXIII; *Rock Tombs* II, Pl. XIX, right side.

42 Pendlebury, *COA* III, 11, 12; M. Shepperson, *JEA* 98 (2012), 19–26; M. Shepperson and M. Hill, *Horizon* 11 (2012), 4–6; Seyfried, *In the Light*, 230–1, Cat. no. 20 illustrates fragments of the stela.

43 B. Kemp, M. Bertram, D. Driaux, A. Hodgkinson and S. Kelly, *JEA* 100 (2014), 1–14; B. Kemp, *Horizon* 15 (2014), 6.

44 See note 43, together with B. Kemp, M. Bertram, D. Driaux, A. Hodgkinson, S. Jędraszek and S. Kelly, *JEA* 101 (2015), 5–15; *Horizon* 15 (2014), 2–5; 16 (2015), 2–3; B. Kemp, *Horizon* 17 (2016), 5–6.

45B. J. Kemp, 'Outlying temples at Amarna.' *AR* VI, 411–62; Kemp, *City*, 119–21; Wegner, *Sunshade Chapel*, 77–88.
46Because the site no longer exists we are very largely dependent upon the excavation report, Peet and Woolley, *COA* I, 109–24, Pls XXIX–XXXIV, XXXVI–XL; the painted pavements are reconstructed in Weatherhead, *Palace Paintings*, 273–343. For a recent discussion, see Wegner, *Sunshade Chapel*, 85–8.
47J. Williamson, *Nefertiti's Sun Temple: a New Cult Complex at Tell el-Amarna*, 2 vols, Leiden, Brill, 2016. This develops the idea that these separate sun temples served the mortuary cult of the elite members of Amarna's society, as does J. Williamson, *JEA* 103 (2017), 117–23.
48Pendlebury, *COA* III, 28–32, 86–142, Pls I, XI, XII, XVI, XVIII–XXIV, XXVIII, XXX–XXXIII, XLVI–LVI; Kemp, *City*, 123–5.
49P.J. Rose, 'Report on the 1986 Amarna pottery survey.' *AR* IV, 114–29; P.J. Rose, 'Report on the 1987 Amarna pottery survey.' *AR* V, 102–14; Kemp, 'Food', 141, Fig. 14.4; Kemp, *City*, Pl. XXXV.
50Davies, *Rock Tombs* IV, 23–4, Pls XXXVI, XXXVII, XLIII.
51Kemp, 'Food', 146–9.
52His tomb: Davies, *Rock Tombs* II, 9–32, Pls II–XXIII, XXVI, XXVII; his Main City house: see note 26; his official residence: *COA* III, 26–7, Pls XI, XXX, XXXI.

53P. Payne, *JEA* 92 (2006), 45–52; P. Payne, *EA* 30 (2007), 18–20; Kemp, *City*, 129–30, Fig. 4.5; C. Simpson, *JEA* 102 (2016), 2–6; C. Simpson, *Horizon* 17 (2016), 2–5.
54Pendlebury, *COA* III, 10.
55H.W. Fairman, in Pendlebury, *COA* III, 169–75; Kemp, *City*, 110–12.
56Kemp, 'Food', 138–45; Kemp, *City*, Pl. XXXV.
57Kemp and Garfi, *Survey*, 51, Fig. 11.
58Murnane, *Texts*, 31.
59Murnane, *Texts*, 151.
60Murnane, *Texts*, 173.
61J. Jacquet, *Karnak-Nord* VII*: le Trésor de Thoutmosis Ier. Installations antérieures ou postérieures au monument*, Cairo, IFAO, 1994, esp. 141–3; H. Jacquet-Gordon, *Karnak-Nord* X*: le Trésor de Thoutmosis Ier. La céramique*, 2 vols, Cairo, IFAO, 2012, I, 143; II, 64, Fig. 64, d–f.
62L. Green, 'Some thoughts on ritual banquets at the court of Akhenaten and in the ancient Near East.' In G. Knoppers and A. Hirsch, eds, *Egypt, Israel and the Ancient Mediterranean World: Festschrift Donald B. Redford*, Winona Lake, IL, Eisenbrauns 2004, 203–22; Kemp, *City*, 145–6.
63Pendlebury, *COA* III, 113–30, Pls XIX, XLVIII–L; Kemp, *City*, 122–31.
64Two ostraca bearing extracts from the book called *Kemyt* have been found in houses within the Great Palace, Pendlebury, *COA* III, 162; others with a fragment of another Twelfth Dynasty 'instruction' warning against treachery have been found in a private house, R.B. Parkinson, 'The Teaching of King Amenemhat I at el-Amarna: BM EA 57458 and 57479.' In A. Leahy and J. Tait, eds, *Studies on Ancient Egypt in Honour of H. S. Smith*, London, EES, 1999, 221–6. Ostraca with quotes from the same text have been found at Amenhetep III's palace town at Malkata: Hayes, *JNES* 10 (1951), 241–2; Leahy, *Malkata*, 27–8.
65Pendlebury, *COA* III, 122–30, Pls XX, XLIX.4; Kemp, *City*, 129–31. I. Shaw, *JFA* 22 (1995), 223–38 discusses the status of this 'Central Village' in some detail, expressing scepticism about its workplace identification.
66Van den Boorn, *Duties* is a detailed study of the text of the 'duties of the vizier'. It was to the vizier at Amarna that the chief of police, Mahu, reported the arrest of men found in the desert, Murnane, *Texts*, 149–50. At the end of the New

Kingdom it was the vizier who took a prominent role in the trial of the robbers of royal tombs and temples at Thebes, McDowell, *Jurisdiction*, 126, 168–9, citing especially P. Abbott, 7 = Peet, *Tomb-robberies*, 42; P. Turin 2021, 4, 1ff.

67 Pendlebury, *COA* III, 86–92, Pls XVI, XLV, XLVI; Kemp, *City*, 131–5.

68 A.R. Schulman, *JARCE* 3 (1964), 51–69.

69 Pendlebury, *COA* III, 131–8, Pls XXI, L–LIV.

70 Davies, *Rock Tombs* IV, 12–18, Pls XIV–XXIX, XXL–XLII. Pl. XXVI documents responsibility to the vizier; Darnell and Manassa, *Tutankhamun's Armies*, 194–6.

71 Building P49.16: Borchardt and Ricke, *Wohnhäuser*, 279–80, St. V, Hp. 92.

72 B. Kemp, *Horizon* 3 (2008), 8–9; Kemp, *City*, 154–61, Pl. XI; Stevens, *Akhenaten's Workers*, 69–80.

73 Seton Lloyd, *JEA* 19 (1933), 1–7 is a presentation, by an architect who worked at Amarna, of a fine model of one of the larger houses. A coloured drawing based on it is H. and R. Leacroft, *The Building of Ancient Egypt*, London, Penguin, 1954, 8–9. Other studies which look more at the housing as a whole are P.T. Crocker, *JEA* 71 (1985), 52–65; A. Koltsida, *Social Aspects of Ancient Egyptian Domestic Architecture*, Oxford, Archaeopress, 2007; Tietze, *Amarna*, 98–117; K. Spence, 'Settlement structure and social interaction at El-Amarna.' In Bietak et al., *Cities*, 289–98.

74 Frankfort, *Mural Paintings*; Kemp and Stevens, *Busy Lives* I, 110–85, 625–7 (colour plates); *Horizon* 4 (2008), 8–9; Kemp, *City*, Pls XXV–XXIX.

75 K. Spence, *JEA* 90 (2004), 123–52.

76 P. Anastasi IV = Caminos, *Miscellanies*, 137–8.

77 F.G. Newton, *JEA* 10 (1924), 291, Pls XXV, XXVI.1; Kemp, *City*, 186–7, fig. 5.27.

78 Davies, *Rock Tombs* I, 41–2, Pls V, XXXII, left side.

79 Do. Arnold, 'The workshop of the sculptor Thutmose.' In Arnold, *Royal Women*, 41–83; F. Seyfried, 'The workshop complex of Thutmosis.' In Seyfried, *In the Light*, 170–86.

80 M. Eccleston, 'Crucibles'. In Kemp and Stevens, *Busy Lives* II, 361–99; A. Stevens and M. Eccleston, 'Craft production and technology.' In T. Wilkinson, ed., *The Egyptian World*, London and New York, Routledge, 2007, 146–59; *Horizon* 2 (2007), 7.

81 S. Ikram, *JEA* 75 (1989), 89–101; Stevens, *Religion*, esp. 133–8, 253–4.

82 B. Kemp, A. Stevens, G.R. Dabbs, M. Zabecki and J.C. Rose, *Antiquity* 87 (2013), 64–87; A. Stevens, G. Dabbs and J. Rose, *Current World Archaeology* 78 (2016), 14–21; B.J. Kemp, 'The orientation of burials at Tell el-Amarna.' In Z. Hawass and J. Richards, eds, *The Archaeology and Art of Ancient Egypt: Essays in Honor of David B. O'Connor*, Cairo, Supreme Council of Antiquities Press, 2007, I, 21–31; regular reports since 2006 in *JEA* and *Horizon*.

83 A. Stevens, *Horizon* 17 (2016), 7.

84 Davies, *Rock Tombs* II, 3, Pls XXIV and XLII.

85 Peet and Woolley, *COA* I, 8, Fig. 1; Kemp and Stevens, *Busy Lives* I, 116–29; B. Kemp, *Akhetaten Sun* 22 (1) (2016), 12–31, where the case is made for seeing Akhenaten's successor as a male king one of whose names was Smenkhkara.

86 W.M.F. Petrie and G. Brunton, *Sedment* II, London, BSAE, 1924, Chs VII and VIII.

87 K.P. Kuhlmann, *MDAIK* 35 (1979), 165–88.

88 Frankfort and Pendlebury, *COA* II, 63, 109, Pl. XXIII.4; Kemp, *City*, Pl. XXX.

89 Original calculations in B.J. Kemp, *MDOG* 113 (1981), 81–97.

90 Demarée and Valbelle, *Les registres*; McDowell, *Village Life*, 51–2; Muhs, *Economy*, 107–8.

91 Janssen, *Village Varia*, 23–6.

92 For the chapels themselves, see Nelson and Hölscher, *Work*, 101–6; U. Hölscher,

The Excavation of Medinet Habu IV. *The Mortuary Temple of Ramses III, Part* II, Chicago, IL, UCP, 1951, 22–5. It is thought that sandstone blocks, belonging to the mayor of Thebes Paser of the time of Rameses III and found reused in the western gateway of the Medinet Habu enclosure, had originally been part of one these nearby chapels, thus giving it an identity: S. Schott, *Wall Scenes from the Mortuary Chapel of the Mayor Paser at Medinet Habu*, Chicago, IL, UCP, 1957. Paser was mayor of Thebes proper on the east bank and not to be confused with the mayor of Thebes Paser who was the colleague of the mayor of western Thebes, Paweraa in the time of Rameses IX, see M.J. Bierbrier, *JEA* 58 (1972), 196.

93 U. Hölscher, *Excavations at Ancient Thebes 1930/31*, Chicago, IL, UCP, 1932, 28–36; Hölscher, *Medinet Habu* V, 5–8. Pls 4–5; Hölscher, *Medinet Habu* I. Hölscher saw the self-organized town that developed as a village of 'peasants and craftsmen of the surrounding district' constructed following a violent destruction of the original town, but this was a common reaction by archaeologists of the time to encountering unplanned settlements, namely, that they represented a decline from a period of order rather than a natural process of adaptation, from a rigid layout to one which reflected personal circumstances. The dates of the various parts are impossible to fix closely, except that one of the replacement houses had belonged to a named individual from the very end of the Twentieth Dynasty, the scribe of the necropolis Butehamun (Figure 8.17, p. 362). Some walls also pre-dated the tomb chapels of the God's Wives of Amun of the Twenty-fifth Dynasty, but this still leaves a wide margin of uncertainty.

94 Peet, *Tomb-robberies*, 93–102; Muhs, *Economy*, 108. For the date see, e.g., Janssen, *Prices and Wages*, 68 and n. 118; and McDowell, *Jurisdiction*, 90 and n. 307; Haring, *Divine Households*, 279–80.

95 One of the scribes, named Iufenamun, belonged to the 'necropolis', thus to Deir el-Medina and was thus an immediate predecessor of Butehamun, whose house is the only identifiable one in the town; see note 93, and McDowell, *Jurisdiction*, 90–1 for Iufenamun. By this time the Deir el-Medina community had been dispersed although its members could still be assembled, McDowell, *Village Life*, 239–43.

96 Kemp and Stevens, *Busy Lives* II, 255–69, 294–340.

97 J. Harrell, *EA* 19 (2001), 36–8; Kemp, *City*, 60–3.

98 H. Willems and R. Demarée, *RdÉ* 60 (2009), 224–8; A. Van der Perre, 'Quarry marks of the Amarna Period. The limestone quarries of Dayr Abū Hinnis.' In J. Budka, F. Kammerzell and S. Rzepka, eds, *Non-textual Marking Systems in Ancient Egypt (and Elsewhere)*, Hamburg, Widmaier, 2015, 69–80; A. van der Perre, *JEH* 7 (2014), 92–3.

99 Murnane, *Texts*, 29–30.

100 This sequence is suggested in B. Kemp, *Akhetaten Sun* 21 (2) 2015, 2–13.

101 Peet and Woolley, *COA* I, 51–108, Pls IX.2, XII, XIV, XVI–XXVIII; *AR* I–IV; B. Kemp, *JEA* 73 (1987), 21–50; D. Samuel, *World Archaeology* 31 (1999), 121–44; C.J. Stevens and A.J. Clapham, 'Botanical insights into the life of an ancient Egyptian village: excavation results from Amarna.' In C.J. Stevens, S. Nixon, M.A. Murray and D.Q. Fuller, *Archaeology of African Plant Use*, Walnut Creek, Left Coast Press, 2014, 151–64. Whether the Deir el-Medina community had actually moved to Amarna, to occupy the Workmen's Village, is still open to debate, M. Müller, 'Deir el-Medina in the Dark – the Amarna period in the history of the village.' *Deir el-Medina Studies*, 154–67.

102 Stevens, *Akhenaten's Workers*; A. Stevens, *JFA* 36 (2011), 100–18.

103 M. Müller, Review of A. Stevens, *Akhenaten's Workers: the Amarna Stone Village*

Survey, 2005–2009. London, 2012. *AJA* 117 (2013), www.ajaonline.org/online-review-book/1671 DOI:10.3764/ajaonline1174.Muller; see also J. Toivari-Viitala, 'Workmen's huts in the Theban Mountains Project.' *Deir el-Medina Studies*, 191–8.

104 Ranke, *Personennamen* I, 234.12; 233.18; II, 127, 218–19, 239. The main source for personal names in the Amarna period is Robert Hari, *Répertoire onomastique amarnien*, Aegyptiaca Helvetica 4, Genève, Éditions des Belles-Lettres, 1976.

105 Ranke, *Personennamen* I, 163.13; II, 127.

106 R. Krauss, *Jahrbuch Preußischer Kulturbesitz* 20 (1983), 119–32; Kemp, *City*, 234, fig. 7.5.

107 Borchardt and Ricke, *Wohnhäuser*, 342–5.

108 For the coffin, A. Bettum, *JEA* 101 (2015), 30, table 2; for Ptahmay's stela, Peet and Woolley, *COA* I, 96–7, Pl. XXVIII.1–3; Ptahmay as being short for Ptahemheb ('Ptah is in festival') or Ptahemhat ('Ptah is at the head'), Ranke, *Personennamen* II, 98, 144.

109 Pendlebury, *COA* III, 176–9. Amenemipet is no. 11 of the list. In the two uncertain 'Aten' cases it is not clear if Ra or Aten is meant.

110 V. Condon, *RdÉ* 35 (1984), 57–82; J.J. Janssen, *VA* 1(3), 109–12; V. Condon, *VA* 2(1), 23–9; M. Gabolde, *D'Akhenaton à Toutânkhamoun*, Lyon, Université Lumière-Lyon 2, Paris, Boccard, 1998, 21, 14–15, n. 92; Zingarelli, *Trade*, 44–7. The papyri are Brooklyn 35.1453A, B.

111 P. Robert Mond 1 and 2: T.E. Peet, *LAAA* 17 (1930), 82–97; Wente, *Letters*, 94–6. The likelihood that Ramose lived at the North Palace comes from his demand at the end of the first letter that someone (male) be brought to him 'that he may stay with me at the house of Meritaten'. What exactly he did as an 'oil boiler' cannot be further determined. The word translated 'oil' was a broad category of oils and oil-based mixtures; see Nicholson and Shaw, *Materials*, 406, 409, 462. For other evidence of private contact with the Aten, see S. Bickel, *Journal of Ancient Egyptian Religion* 3 (2003), 23–45. As for Ramose's words, whilst the precise meaning is hard to catch, their familiarity in respect of the Aten is striking.

112 Peet and Woolley, *COA* I, 92–108, Pls XXIV–XXVIII; *AR* I–IV; F. Weatherhead and B. Kemp, *The Main Chapel at the Amarna Workmen's Village and its Wall Paintings*, London, EES, 2007.

113 Peet and Woolley, *COA* I, 95–9.

114 Stevens, *Religion* provides a comprehensive review of the evidence.

115 Frankfort and Pendlebury, *COA* II, 61, 88, Pls IX, XXXV.5.

116 Borchardt and Ricke, *Wohnhäuser*, 111–12, St. III, IV, Hp. 28.

117 Borchardt and Ricke, *Wohnhäuser*, 222, St. II–IV, Hp. 64, Taf. 28; S. Seidlmayer, *MDAIK* 39 (1983), 204–6.

118 Stevens, *Religion*, 219–34.

119 Peet and Woolley, *COA* I, 25, Pl. XII.2, 4, 5. The original field notebook lists parts of two figurines rather than one; Kemp, *City*, 241, Fig. 7.13.

120 G. Pinch, *Orientalia* 52 (1983), 405–14; Pinch, *Votive Offerings*, 197–234.

121 Peet and Woolley, *COA* I, 59–60, 75, Pl. XVIII.3; B.J. Kemp, *JEA* 65 (1979), 47–53; B. Kemp, *EA* 34 (2009), 18–19; Kemp, *City*, 239–41, Fig. 7.11.

122 K. Szpakowska, *JARCE* 90 (2003), 113–22; Stevens, *Religion*, 100–3, 175–6, 292–3.

123 Davies, *Rock Tombs* III, 16–17, Pls XXII–XXIV; Kemp, *City*, 250–2, Fig. 7.22; 254, Fig. 7.25.

124 Martin, *Royal Tomb* I, 37–74; II, 57–60. The total includes 11 unfinished examples, found in an area of sculpting debris north of the Great Palace.

Nefertiti is represented by one *ushabti*-figure from an uncertain provenance.

125 A. Bettum, *JEA* 101 (2015), 29–32, the quote being from p. 31.

126 A. Stevens, G. Dabbs and J. Rose, *Current World Archaeology* 78 (2016), 14–21, p. 21.

127 Ibid., 19–20.

128 G.R. Dabbs and J.C. Rose, *JEA* 102 (2016), 7–11, p. 7. A second season of excavation, in 2017, has confirmed this pattern of early death after hard lives for samples of burials across a wide extent and applying to a buried population in the low thousands.

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